

CD/DVD Player

Operating Instructions



DVP-F41MS

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

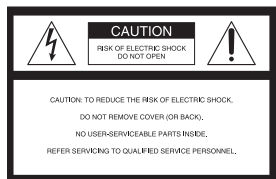
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

CAUTION

The use of optical instruments with this product will increase eye hazard. As the laser beam used in this CD/DVD player is harmful to eyes, do not attempt to disassemble the cabinet.

Refer servicing to qualified personnel only.

The following caution label is located on the laser protective housing inside the enclosure.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

TO PREVENT ELECTRIC SHOCK MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

For customers in the U.S.A.

Owner's Record

The model and serial numbers are located at the bottom of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. DVP-F41MS

Serial No. _____

CAUTION

You are cautioned that any change or modifications not expressly approved in this manual could void your authority to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Welcome!

Thank you for purchasing this Sony CD/DVD Player. Before operating this player, please read this manual thoroughly and retain it for future reference.

Precautions

On safety

- Caution – The use of optical instruments with this product will increase eye hazard.
- Should any solid object or liquid fall into the cabinet, unplug the player and have it checked by qualified personnel before operating it any further.
- Do not put any foreign objects in the DC IN 10.5 V (external power input) jack.

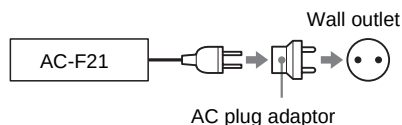
On power sources

- Use only the supplied AC power adaptor. Do not use any other AC power adaptor. It may cause a malfunction.

Polarity of the plug



- If the AC power adaptor causes interference to the radio or television reception, move it away from the radio or television.
- Do not touch the AC power adaptor with wet hands.
- The player is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the player itself has been turned off.
- If you are not going to use the player for a long time, be sure to disconnect the player from the wall outlet. To disconnect the AC power cord, grasp the plug itself; never pull the cord.
- Should the AC power cord need to be changed, have it done at a qualified service shop only.
- Use a commercially available AC plug adaptor, if necessary, depending on the design of the wall outlet.



On placement

- Place the player in a location with adequate ventilation to prevent heat build-up in the player.
- Do not place the player and the AC power adaptor on a soft surface such as a rug.
- Do not place the player and the AC power adaptor in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- Do not put any object on top of the player. The player may be damaged.

On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the player. Should this occur, the player may not operate properly. In this case, remove the disc and leave the player turned on for about half an hour until the moisture evaporates.
- Do not insert a disc with non-standard shape (e.g., card, heart) into the player. The disc may not be ejected and cause a malfunction.
- When you move the player, take out any discs. If you don't, the disc may be damaged.

On adjusting volume

Do not turn up the volume while listening to a section with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level section is played.

On "Memory Stick"

- Do not insert any foreign object such as metal into the "Memory Stick" slot. It may cause a malfunction.

continued ➔

- When you remove the “Memory Stick,” do not pull it forcibly. Remove the “Memory Stick” as described on page 72.

On cleaning

Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On cleaning discs

Do not use a commercially available cleaning disc. It may cause a malfunction

If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

IMPORTANT NOTICE

Caution: This player is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

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About this Manual

- Instructions in this manual describe the controls on the remote. You can also use the controls on the player if they have the same or similar names as those on the remote.
- The icons used in this manual are described below:

Icon	Meaning
DVD VIDEO	Functions available for DVD VIDEOS or DVD-Rs/DVD-RWs in Video mode
DVD-RW	Functions available for DVD-RWs in VR (Video Recording) mode
VIDEO CD	Functions available for VIDEO CDs or CD-Rs/CD-RWs
CD	Functions available for music CDs or CD-Rs/CD-RWs
DATA-CD	Functions available for MP3* audio tracks or JPEG image files on CD-ROMs/CD-Rs/CD-RWs
MS	Functions available for JPEG image files on a “Memory Stick”
MGMS	Functions available for ATRAC3** audio tracks or JPEG image file on a “MagicGate (MG) Memory Stick”
	More convenient features

The following terms will be used to explain common features in similar media.

- “DVD” for DVD VIDEOS, DVD-Rs and DVD-RWs (Video mode/VR mode)
- “Memory Stick” for both “Memory Stick” and “MG Memory Stick”

* Audio compression standard defined by ISO (International Organization for Standardization)/MPEG

** Adaptive Transform Acoustic Coding 3: Audio compression technology
US and foreign patents licensed from Dolby Laboratories.

This Player Can Play the Following Discs

Format of discs
DVD VIDEO 
DVD-RW 
VIDEO CD 
Music CD 

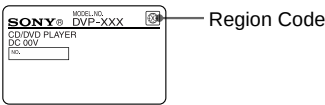
“DVD VIDEO” and “DVD-RW” are trademarks.

Region code

Your player has a region code printed on the back of the unit and will only play DVDs labeled with identical region codes.

DVDs labeled  will also play on this player.

If you try to play any other DVD, the message “Playback prohibited by area limitations.” will appear on the TV screen. Depending on the DVD, no region code indication may be labeled even though playing the DVD is prohibited by area restrictions.



continued ➔

Example of discs that the player cannot play

The player cannot play the following discs:

- CD-ROMs/CD-Rs/RWs (except the discs recorded in the following formats:
 - Music CD format
 - VIDEO CD format
 - MP3 audio tracks and JPEG image files which conform to ISO9660* level 1/level 2/Joliet)
- Data part of CD-Extras
- DVD-ROMs
- DVD Audio discs
- HD layer on SACDs

* A logical format of files and folders on CD-ROMs, defined by ISO (International Organization for Standardization).

Also, the player cannot play the following discs:

- A DVD VIDEO with a different region code (page 98).
- A disc recorded in a color system other than NTSC, such as PAL or SECAM. (This player conforms to the NTSC color system.)
- A disc that has a non-standard shape (e.g., card, heart).
- A disc with paper or stickers on it.
- A disc that has the adhesive of cellophane tape or a sticker still left on it.

Note

On playing DVD-R/DVD-RW/CD-R/CD-RW

Some DVD-Rs, DVD-RWs, CD-Rs or CD-RWs cannot be played on this player due to the recording quality or physical condition of the disc, or the characteristics of the recording device. The disc will not play if it has not been correctly finalized.

Discs containing one-generation copy controlled contents recorded with CPRM (Content Protection for Recordable Media) protection cannot be played on this player.

For more information, see the operating instructions for the recording device.

Note that discs created in the Packet Write format also cannot be played.

Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally set by software producers. Since this player plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also, refer to the instructions supplied with the DVDs or VIDEO CDs.

Copyrights

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents, other intellectual property rights owned by Macrovision Corporation, and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only, unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Notes about the Discs

On handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After pressing  on the player to eject the disc, do not leave the disc as it is. Remove it completely from the player.
- After playing, store the disc in its case.
- If glue is present on the outer edge of the disc, wipe the edge of the disc with the side of a pen or pencil so that the glue is spread evenly along the edge before inserting the disc into the player. Be sure not to touch the playback side of the disc when wiping the edge.
- If burrs remain on the outer edge of the disc, remove them by rubbing with the side of a pen or pencil. If burrs are not removed, discs may not load properly into the player, or fragments of plastic adhering to the playback side of the disc may cause skipping in the sound.

On cleaning

- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.

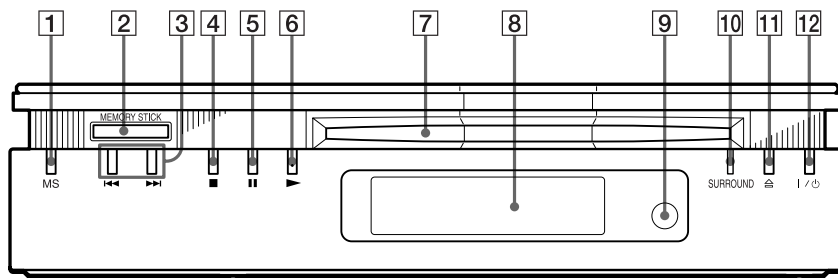


- Do not use solvents such as benzene, thinner, commercially available cleaners, or anti-static spray intended for vinyl LPs.

Index to Parts and Controls

For more information, refer to the pages indicated in parentheses.

Front Panel



- 1** MS (“Memory Stick”) button/indicator (73)

Lights up in:

- orange in MS mode (“Memory Stick” playback mode)
- yellow while reading the data in the “Memory Stick”

It goes out in disc (playback) mode.

- 2** MEMORY STICK (“Memory Stick”) slot (72)

- 3** ◀◀/▶▶ (previous/next) buttons (39)

- 4** ■ (stop) button (38)

- 5** || (pause) button (39, 82)

- 6** ▶ (play) button (38)

- 7** Disc slot (38)

- 8** Front panel display (11)

- 9** ■ (remote sensor) (17)

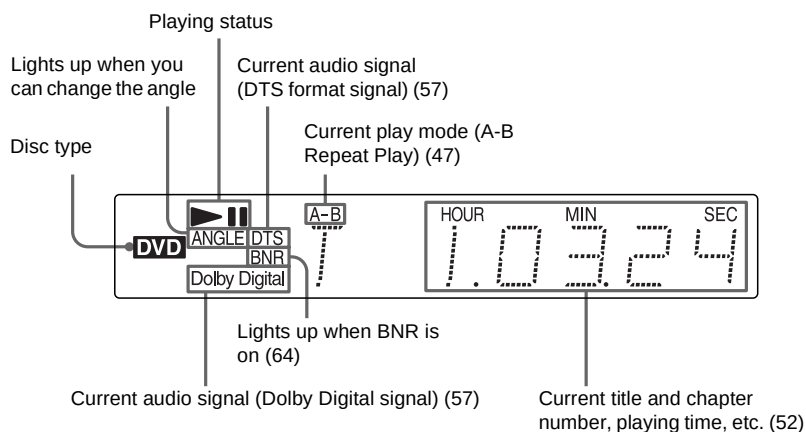
- 10** SURROUND indicator (59)

- 11** ⏏ (eject) button (39)

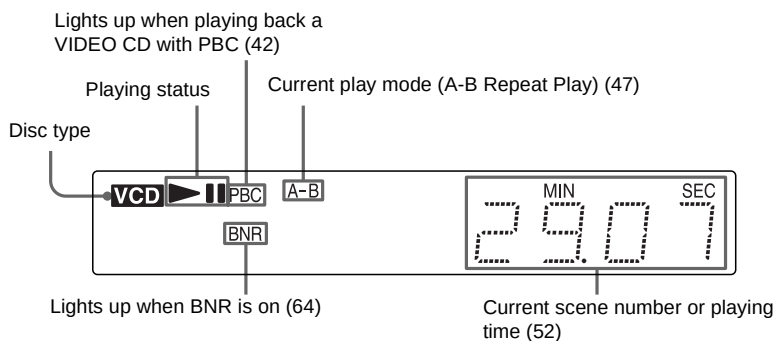
- 12** I/⏻ (power) button/indicator (38)

Front Panel Display

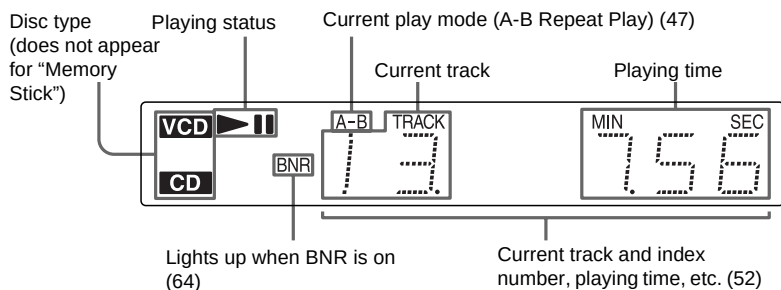
When playing back a DVD VIDEO/DVD-RW



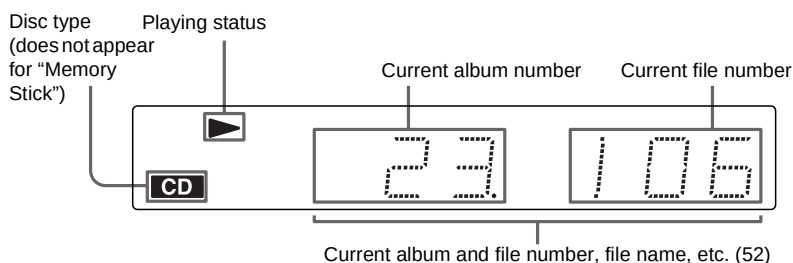
When playing back a VIDEO CD (PBC)



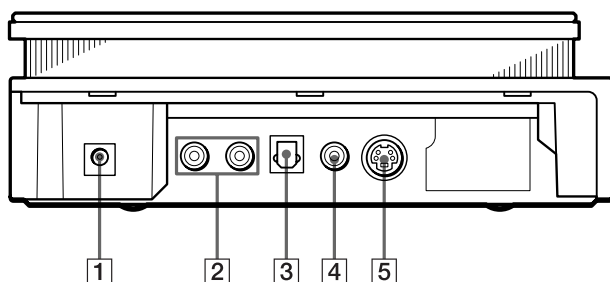
**When playing back a CD/DATA-CD (MP3 audio track)/VIDEO CD (without PBC)/
“MG Memory Stick” (ATRAC3 audio track)**



When viewing a JPEG image on a DATA-CD/ “Memory Stick”

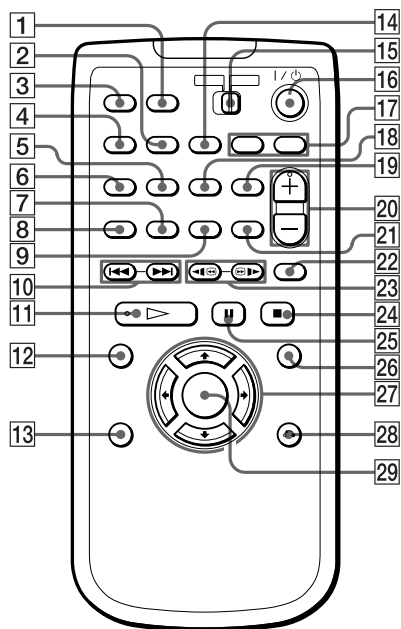


Side Panel



- 1 DC IN 10.5 V jack (19)
- 2 AUDIO OUT L/R jacks (19, 25, 26, 28)
- 3 DIGITAL OUT (OPTICAL) jack (26, 28, 30)
- 4 VIDEO OUT jack (19, 22)
- 5 S-VIDEO OUT jack (22)

Remote

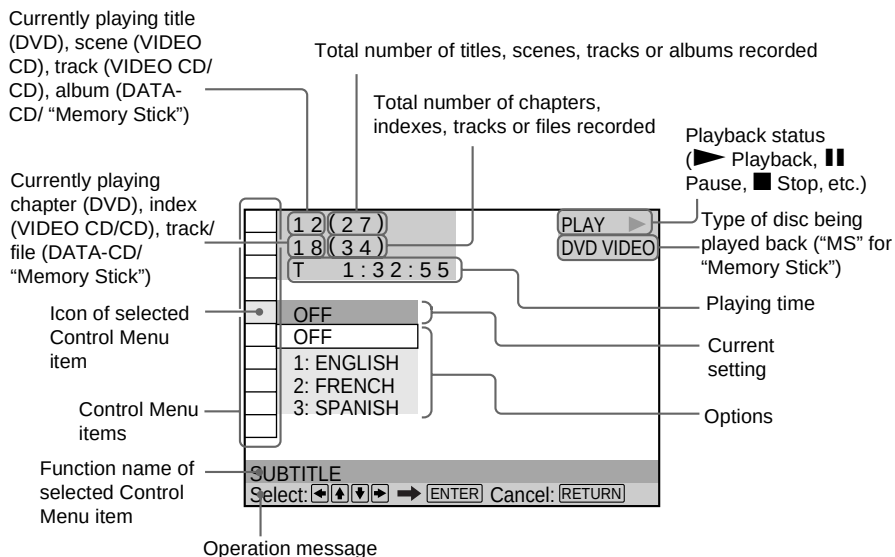


- 1 MS ("Memory Stick") button (73, 75)
- 2 BNR (Block Noise Reduction) button (64)
- 3 TIME/TEXT button (52)
- 4 SURROUND button (59)
- 5 ANGLE button (62)
- 6 AUDIO button (57)
- 7 PROGRAM button (44)
- 8 SHUFFLE button (46)
- 9 REPEAT button (46)
- 10 ◀◀/▶▶ PREV (previous) /NEXT buttons (39)
- 11 ▷ PLAY button* (38)
- 12 TOP MENU button (41)
- 13 DISPLAY button (14, 85)
- 14 SEARCH MODE button (50)
- 15 TV/DVD switch (83)
- 16 I/⏻ (power) button (38)
- 17 TV operation buttons (83)
- 18 SUBTITLE button (63)
- 19 CLEAR button (44, 46, 47)
- 20 VOL (volume) +/- buttons* (83)
- 21 A-B button (47)
- 22 REPLAY button (39)
- 23 ◀◀◀/▶▶▶ SCAN/SLOW buttons (49)
- 24 ■ STOP button (39)
- 25 || PAUSE button (39)
- 26 MENU button (41)(67)(73)
- 27 ⬅/➡/⬆/⬇ buttons (34)
- 28 ↶ RETURN button (42)
- 29 ENTER button (34)

* Use the tactile dot as a reference when operating the player.

Guide to the Control Menu Display

Use the Control Menu to select a function that you would like to use. The Control Menu appears when the DISPLAY button is pressed. For details, please refer to the page in parentheses.



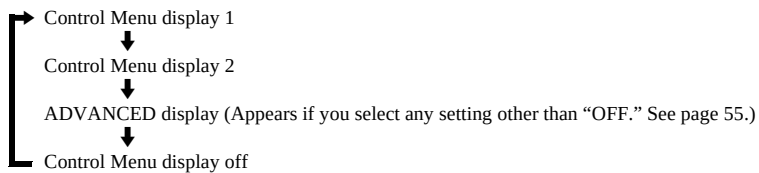
List of Control Menu Items

	TITLE (page 50)/SCENE (page 50)/ TRACK (page 50)	Selects the title, scene, or track to be played.
	CHAPTER (page 50)/INDEX (page 50)	Selects the chapter or index to be played.
	TRACK (page 50, 67, 73)	Selects the track to be played.
	INDEX (page 50)	Selects the index to be played.
 	ALBUM (audio) (page 67) ALBUM (image) (page 69, 76)	Selects the album to be played.
	FILE (page 69, 76)	Selects the JPEG image file to be played.
	TIME/TEXT (page 50)	Checks the elapsed time and the remaining playback time. Input the time code for picture and music searching. Displays the DVD or CD text.

	DATE	Displays the recorded date, etc. of the current JPEG image.
	ORIGINAL/PLAY LIST (page 41)	Selects the type of titles (ORIGINAL or PLAY LIST) to be played when playing DVD-RW (VR mode).
	AUDIO (page 57)	Changes the audio setting.
	SUBTITLE (page 63)	Displays the subtitles. Changes the subtitle language.
	ANGLE (page 62)	Changes the angle.
	TVS (TV Virtual Surround) (page 59)	Selects the surround functions.
	ADVANCED (page 55)	Checks the information (bit rate or layer) on the disc during playback.
	PARENTAL CONTROL (page 78)	Set to prohibit playback on this player.
	SETUP (page 85)	QUICK Setup (page 34) Use Quick Setup to choose the desired language for the on-screen display, the aspect ratio of the TV and the audio outputs. CUSTOM Setup (page 85) In addition to the Quick Setup setting, you can adjust other various settings. RESET Returns the settings in “SETUP” to the default setting.
	PROGRAM (page 44)	Selects the title, chapter, or track to play in the order you want.
	SHUFFLE (page 46)	Plays the title, chapter, or track in a random order.
	REPEAT (page 46)	Plays the entire disc or “MG Memory Stick” (all titles/all tracks), or one title/chapter/album/track repeatedly.
	A-B REPEAT (page 47)	Specifies the parts you want to play repeatedly.
	BNR (page 64)	Adjusts the picture quality by reducing the “block noise” or mosaic like patterns that appear on your TV screen.
	MEMORY STICK (page 73, 75)	Selects the data type (ATRAC3 audio track or JPEG image file) to be played when playing a “Memory Stick.”
	DATA-CD (page 67, 68)	Selects the data type (MP3 audio track or JPEG image file) to be played when playing a DATA-CD.

continued →

💡 Each time you press DISPLAY, the Control Menu display changes as follows:



Only Control Menu display 1 appears during CD or “Memory Stick” playback. The Control Menu items differ depending on the type of the disc or “Memory Stick.”

💡 The Control Menu icon indicator lights up in green  →  when you select any item except “OFF” (“TVS,” “PROGRAM,” “SHUFFLE,” “REPEAT,” “A-B REPEAT,” “BNR” only). The “ANGLE” indicator lights up in green only when the angles can be changed.

Quick Overview

A quick overview presented in this chapter will give you enough information to start using the player for your enjoyment. To use the surround sound features of this player, refer to “Hookups” on page 21.

Notes

- You cannot connect this player to a TV that does not have a video input jack.
- Be sure to turn off the power of each component before connecting.

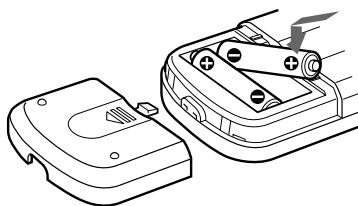
Step 1: Unpacking

Check that you have the following items:

- Audio/video cord (pinplug x 3 ↔ pinplug x 3) (1)
- Remote commander (1)
- Size AA (R6) batteries (2)
- AC power adaptor AC-F21 (1)
- AC power cord (1)
- Jack cover for vertical installation (1)

Step 2: Inserting Batteries into the Remote

You can control the player using the supplied remote. Insert two size AA (R6) batteries by matching the ⊕ and ⊖ ends on the batteries to the markings inside the compartment. When using the remote, point it at the remote sensor on the player.

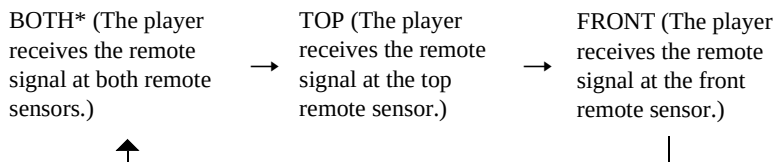


If you cannot operate the player with the remote

The player has 2 remote sensors, one at the top and one on the front (page 20). If one of the remote sensor is exposed to direct sunlight or lighting apparatus, the remote may not operate correctly. If this happens, select a remote sensor in the following way until you find one that works. (If the MS indicator on the player is lit, turn it off by pressing MS.)

When the power is on and no disc is inserted in the player, press **◀◀** for more than 2 seconds while pressing **■**.

The selected remote sensor is displayed on the front panel display as follows:



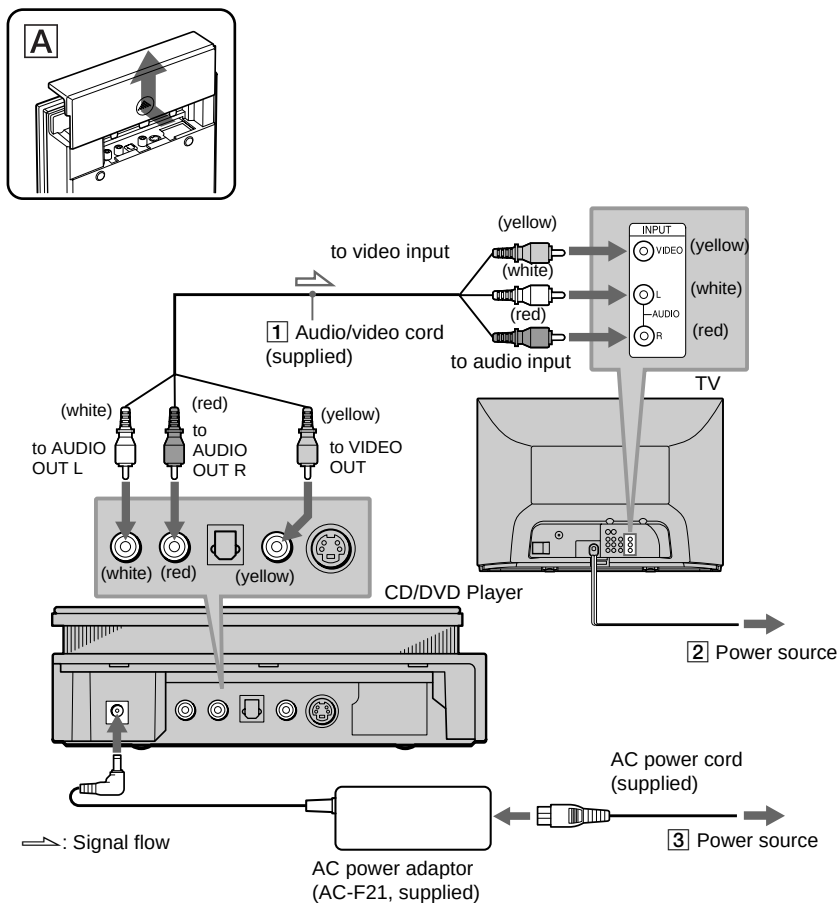
* The default setting

Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct light from the sun or lighting apparatus. Doing so may cause a malfunction.
- If you do not use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Step 3: TV Hookups

Remove the jack cover from the player (see fig. [A]). Connect the supplied audio/video cord and power cord in the order ([1]~[3]) shown below. Be sure to connect the power cord last.



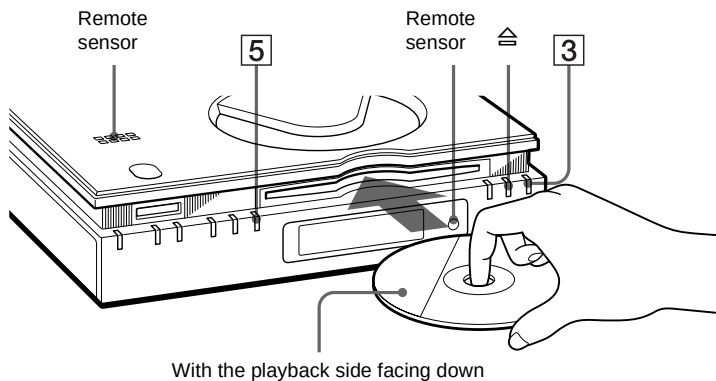
When connecting to a wide screen TV

Depending on the disc, the image may not fit your TV screen.

If you want to change the aspect ratio, please refer to page 87.

Step 4: Playing a Disc

- 1** Turn on the TV.
- 2** Switch the input selector on the TV to the player.



- 3** Press **I/⏻** on the player.
 - 4** Insert the disc into the disc slot with the playback side facing down.
 - 5** Press **▶**.
- The player begins playing the disc.

After Step 5

Depending on the disc, a menu may be displayed on the TV screen. If so, select the item you want from the menu and play the DVD VIDEO (page 41) or VIDEO CD disc (page 42).

To stop playing

Press **■**.

To take out the disc

Press **⏻** on the player, then remove the disc.

To turn off the player

Press **I/⏻**. The player is set to standby mode and the **I/⏻** indicator lights up in red.

 To play a DATA-CD, see page 67. You can play also a "Memory Stick" on this player, see page 73.

Hooking Up the Player

Follow Steps 1 to 5 to hook up and adjust the settings of the player.

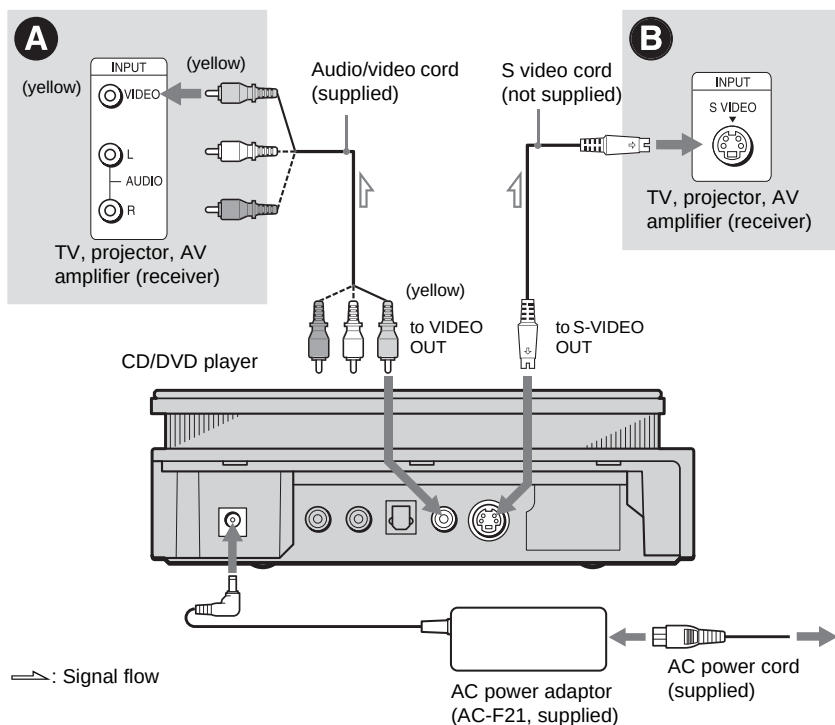
Before you start, turn off the power, check that you have all of the supplied accessories, and insert the batteries into the remote (page 17). Remove the jack cover (page 19).

Notes

- Plug cords securely to prevent unwanted noise.
- Refer to the instructions supplied with the components to be connected.

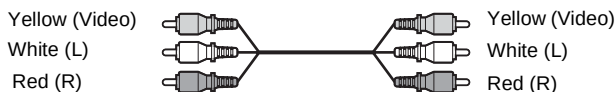
Step 1: Connecting the Video Cords

Connect this player to your TV monitor, projector, or AV amplifier (receiver) using a video cord. Select one of the patterns **A** or **B**, according to the input jack on your TV monitor, projector, or AV amplifier (receiver).



A If you are connecting to a video input jack

Connect the yellow plugs of the audio/video cord (supplied) to the yellow (video) jacks. You will enjoy standard quality images.



Use the red and white plugs to connect to the audio input jacks (page 25).

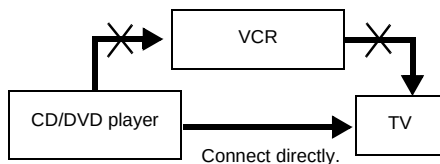
B If you are connecting to an S VIDEO input jack

Connect the S VIDEO cord (not supplied). You will enjoy high quality images.



Note

Do not connect your player to a VCR. You may not receive a clear image on the TV screen if you pass the player signals via the VCR.



Step 2: Connecting the Audio Cords

Refer to the chart below to select the connection that best suits your system. The surround effects you will enjoy depend on the connections and components you use.

Select a connection

Select one of the following connections, **A** through **D**.

Connection	Components to be connected
A (page 25)	TV (stereo)
B (page 26)	Stereo amplifier (receiver) (having L and R audio input jacks only, or having a digital input jack) • 2 speakers (front L and R)
B (page 26)	MD deck/DAT deck
C (page 28)	AV amplifier (receiver) with a Dolby* Surround (Pro Logic) decoder (having L and R audio input jacks only, or having a digital input jack) • 3 speakers (front L and R, and rear (monaural)) • 6 speakers (front L and R, center, rear L and R, subwoofer)
D (page 30)	AV amplifier (receiver) having a Dolby Digital or DTS** decoder, and a digital input jack • 6 speakers (front L and R, center, rear L and R, subwoofer)

* Manufactured under license from Dolby Laboratories. "Dolby," "Pro Logic," and the double-D symbol are trademarks of Dolby Laboratories. Confidential unpublished works. © 1992-1997 Dolby Laboratories. All rights reserved.

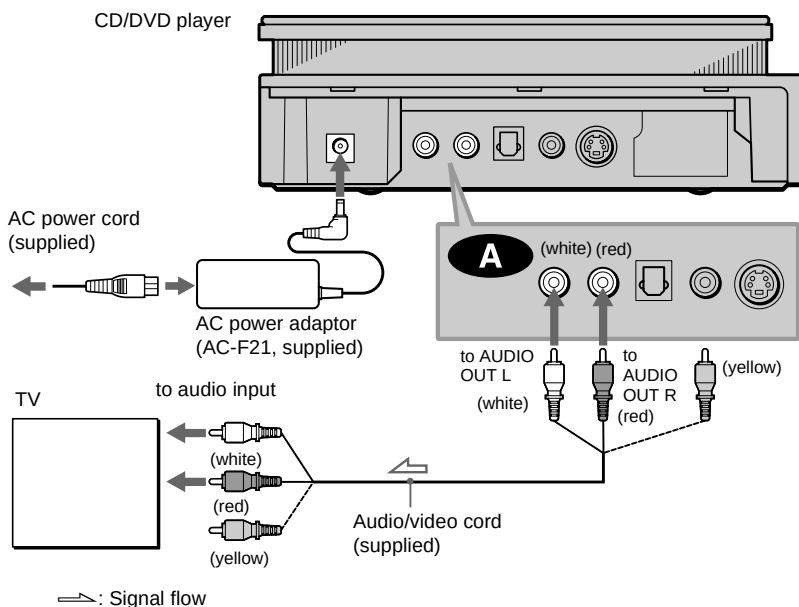
** "DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

A Connecting to your TV

This connection will use your TV speakers for sound.

■ Recommended surround sound effects for this connection.

- TVS DYNAMIC (page 59)
- TVS WIDE (page 59)



The yellow plug is used for video signals (page 22).

B Connecting to a stereo amplifier (receiver) and 2 speakers/Connecting to an MD deck or DAT deck

This connection will use your 2 front speakers connected to your stereo amplifier (receiver) for sound. If the stereo amplifier (receiver) has audio input jacks L and R only, use **B-1**. If the amplifier (receiver) has a digital input jack, use **B-2**. When connecting to an MD deck or a DAT deck, use **B-2**. In this case, you can also connect the player directly to the MD deck or DAT deck without using your stereo amplifier (receiver).

■ Recommended surround sound effects for the **B-1** connection only.

- TVS STANDARD (page 59)



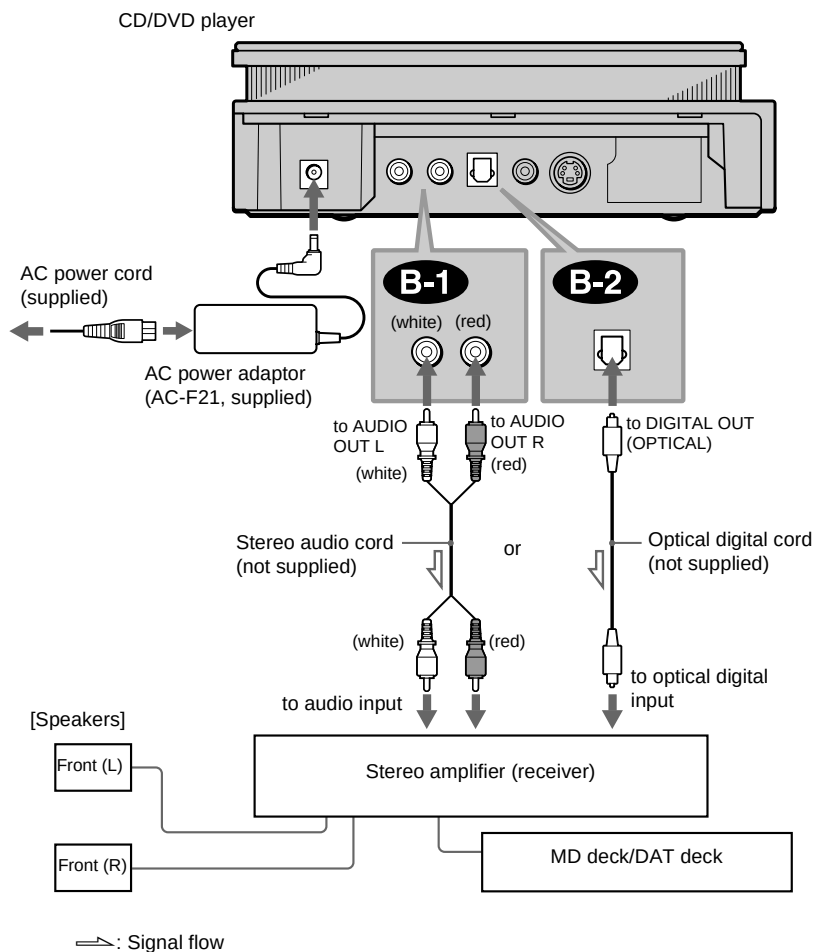
In connection **B-1**, you can use the supplied audio/video cord instead of using a separate audio cord.



To realize better surround sound effects, make sure that your listening position is in between your speakers.

Notes

- If you select one of the TVS effects while playing a disc, no sound will come from your speakers with the **B-2** connection.
- MP3 audio and ATRAC3 audio tracks will not be output from the DIGITAL OUT (OPTICAL) jack.



C Connecting to a Dolby Surround (Pro Logic) decoder amplifier (receiver) and 3 to 6 speakers

This connection will allow you to enjoy the surround effects of the Dolby Surround (Pro Logic) decoder on your amplifier (receiver). If you have an AV amplifier (receiver) equipped with a Dolby Digital or DTS decoder, refer to page 30.

You can enjoy the Dolby Surround effects only when playing Dolby Surround audio or multichannel audio (Dolby Digital) discs.

Pro Logic uses a minimum of 3 speakers (front L and R, and rear (monaural)). The surround effects are enhanced if 6 speakers (front L and R, center, rear L and R, and subwoofer) are used. If your amplifier (receiver) has R and L audio input jacks only, use **C-1**. If your amplifier (receiver) has a digital input jack, use **C-2**.

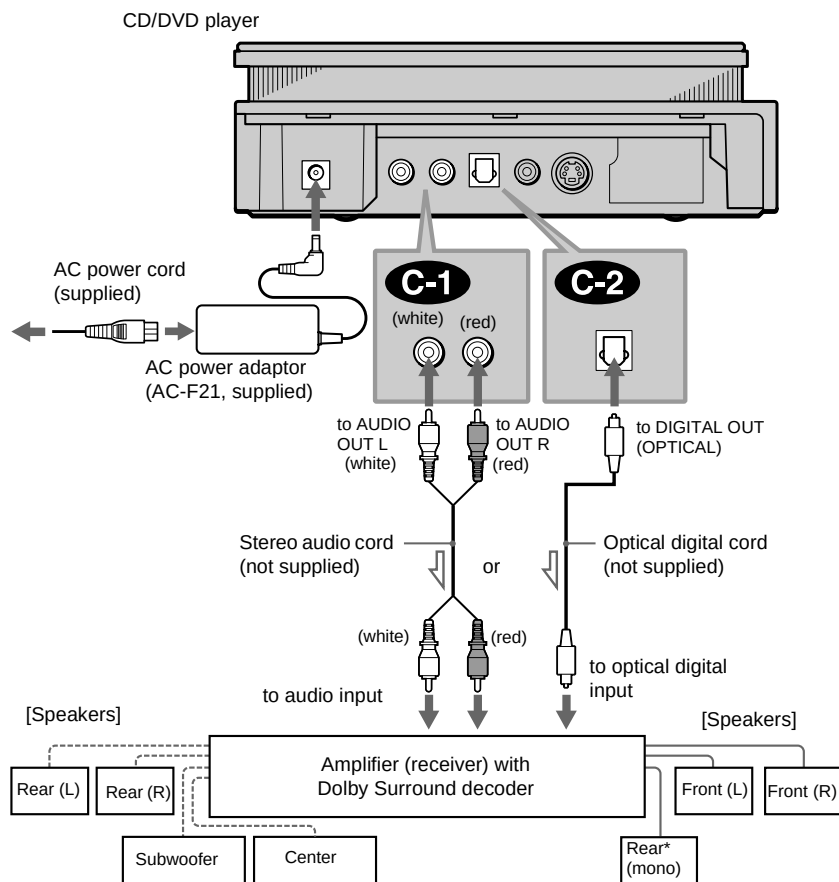
■ Recommended surround sound effects using this connection with your amplifier (receiver).

- Dolby Surround (Pro Logic) (page 91)

 For correct speaker setting location, please refer to the operating instructions of the amplifier (receiver).

Note

MP3 audio and ATRAC3 audio tracks will not be output from the DIGITAL OUT (OPTICAL) jack.



→: Signal flow

* When connecting 6 speakers, replace the monaural rear speaker with a center speaker, 2 rear speakers and a subwoofer.

D Connecting to an AV amplifier (receiver) with a digital input jack having a Dolby Digital or DTS decoder, and 6 speakers

This connection will allow you to use the Dolby Digital or DTS decoder function of your AV amplifier (receiver). You are not able to enjoy the TVS sound effects of the player.

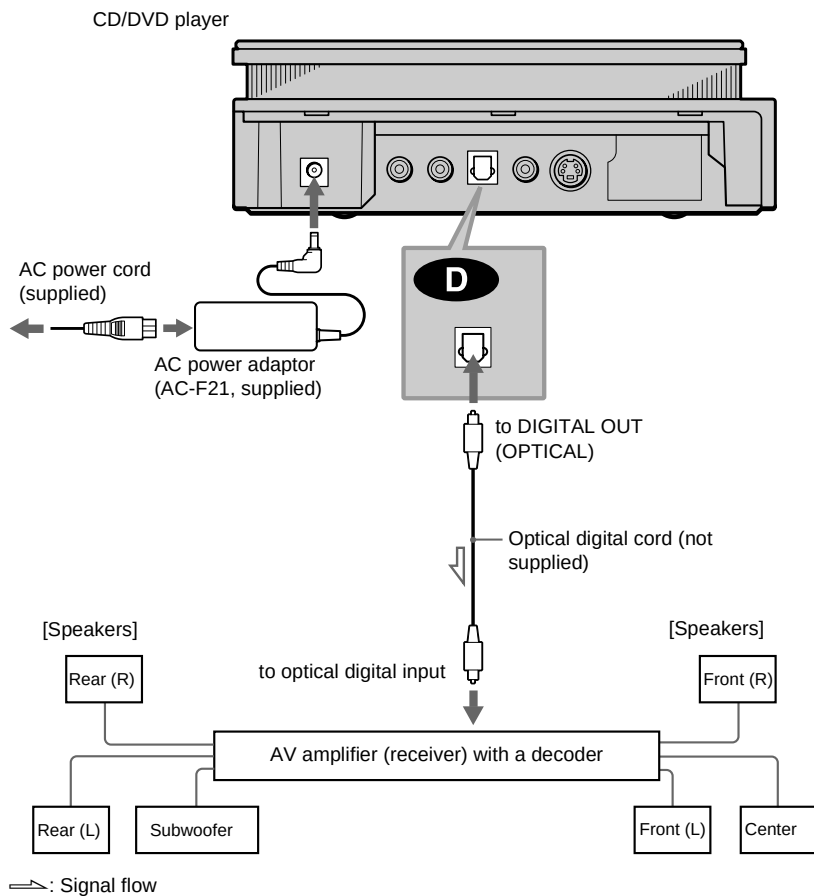
■ Recommended surround sound effects using this connection with your amplifier (receiver).

- Dolby Digital (5.1ch) (page 91)
- DTS (5.1ch) (page 91)

 To enhance the surround sound effects, refer to the operating instructions of the amplifier (receiver) for correct speaker setting location.

Notes

- After you have completed the connection, be sure to set “DOLBY DIGITAL” in “AUDIO SETUP” to “DOLBY DIGITAL” (page 34). If your AV amplifier (receiver) has a DTS decoder, set “DTS” in “AUDIO SETUP” to “ON” (page 34). Otherwise, no sound or a loud noise will come from the speakers.
- MP3 audio and ATRAC3 audio tracks will not be output from the DIGITAL OUT (OPTICAL) jack.



Step 3: Attaching the Jack Cover

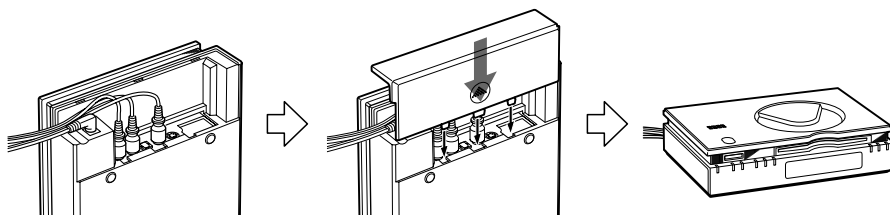
You can install the player horizontally, vertically or on the wall.

Notes

- Make sure that the connecting cords are not trapped by the jack cover.
- If you use commercially available cords, make sure that those cords are similar to the supplied cords in size. If the cords are too thick or hard, or the plug is too large, you may not be able to attach the jack cover securely.

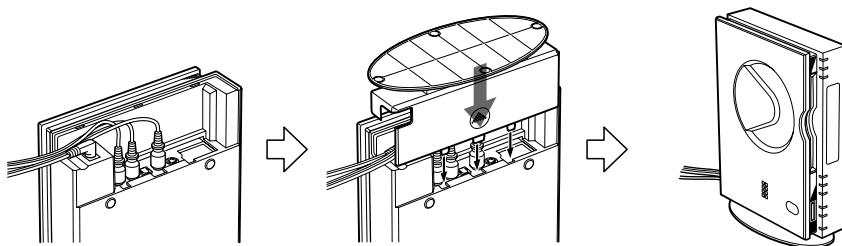
When you install the player horizontally

First, gather all the connecting cords together and let them pass through the side of the player. Then attach the jack cover carefully not to trap the cords.



When you install the player vertically

First, gather all the connecting cords together and let them pass through the side of the player. Then attach the jack cover for vertical installation (supplied) carefully not to trap the cords.



Notes

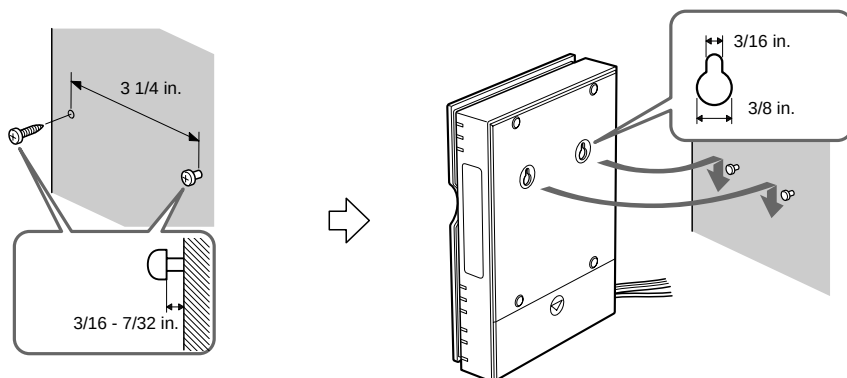
- When you place the player in a horizontal position, remove the jack cover for vertical installation.
- To move the player, hold the player itself. If you hold the flat part of the jack cover for vertical installation, it may break.
- Do not place the player in a vertical position without attaching the jack cover for vertical installation. If you do not attach it, the player will be unstable and may fall over.

When you install the player on the wall

Attach the jack cover as in the same way for the horizontal installation.

Fastening screws are not supplied. You need to determine the appropriate hanging screws and/or other necessary hardware needed to securely and safely fasten the unit to the wall. Placement of the screws should be at the same height and should be 3 1/4 in. (80 mm) apart. The screws or other fasteners should protrude by 3/16 to 7/32 in. (4 to 5 mm).

Please be sure you have selected fasteners or screws that will fit in the hanging holes on the bottom of the unit. Remove the seals covering the hanging holes. Hang the player on the screws. Push the player tightly against the wall.



Note

WHEN YOU DISCONNECT OR CONNECT THE CORDS, TAKE THE PLAYER DOWN FROM THE WALL.

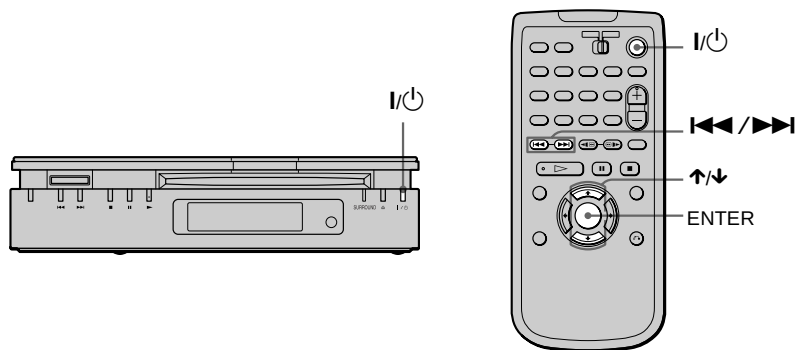
Step 4: Connecting the Power Cord

Plug the player and TV power cords into an AC outlet.

Do not connect the power cord of your player to the “switched” power socket of an amplifier (receiver). Otherwise, when you turn off the power of your amplifier (receiver), the settings for the player may be lost.

Step 5: Quick Setup

Follow the steps below to make the minimum number of basic adjustments to use the player. To skip an adjustment press ►►, to return to the previous adjustment, press ◀◀.



1 Turn on the TV.

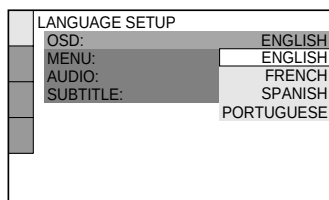
2 Switch the input selector on the TV to the player.

3 Press I/⏻ on the player or the remote.

“Press [ENTER] to run QUICK SETUP.” appears at the bottom of the screen. If this message does not appear, select “QUICK” (“QUICK”) under “SETUP” (“SETUP”) in the Control Menu (page 85) to run Quick Setup.

4 Press ENTER without inserting a disc.

The Setup Display for selecting the language used in the on-screen display appears.

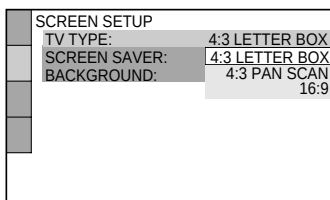


5 Press ↑/↓ to select a language.

The player uses the language selected here to display the menu and subtitles as well.

6 Press ENTER.

The Setup Display for selecting the aspect ratio of the TV to be connected appears.

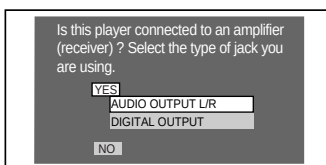


7 Press ↑/↓ to select the item.

TV Type	You select	Page
4:3 standard TV	4:3 LETTER BOX or 4:3 PAN SCAN	87
A wide-screen TV or 4:3 standard TV with the wide-screen mode	16:9	87

8 Press ENTER.

The Setup Display for selecting the type of jack used to connect your amplifier (receiver) appears.



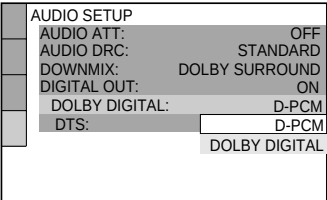
9 Press ↑/↓ to select the item, then press ENTER.

- When “NO” or “AUDIO OUTPUT L/R” is selected, Quick Setup is finished and connections are complete.
- When “DIGITAL OUTPUT” is selected, the Setup Display for “DOLBY DIGITAL” appears. Proceed to Step **10**.

continued →

10 Press ↑/↓ to select the item.

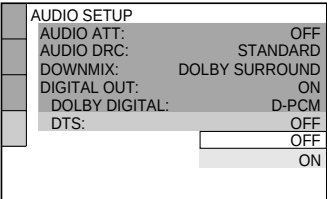
Choose the item that matches the audio connection you selected in pages 26 to 30 (**B** through **D**).



Audio Cord Connection Type	You select	Page
B-2 C-2	D-PCM	91
D	DOLBY DIGITAL (only if the amplifier/receiver has a Dolby Digital decoder)	91

11 Press ENTER.

“DTS” is selected.



12 Press ↑/↓ to select the item.

Choose the item that matches the audio connection you selected in pages 26 to 30 (**B** through **D**).

Audio Cord Connection Type	You select	Page
B-2 C-2	OFF	91
D	ON (only if the amplifier/receiver has a DTS decoder)	91

13 Press ENTER.

Quick Setup is finished. All connections and setup operations are complete.

Note

You can directly start Quick Setup only when you run it for the first time.
To run Quick Setup a second time, select “QUICK” under “SETUP” in the Control Menu (page 85).

Enjoying the surround sound effects

To enjoy the surround sound effects of this player or your amplifier (receiver), the following items must be set as described below for the audio connection you selected in pages 26 to 30 (**B** through **D**). Each of these are the default settings and do not need to be adjusted when you first connect the player. Refer to page 85 for using the Setup Display.

Audio Connection (pages 25 to 30)

A

No additional settings are needed.

B-1 **C-1**

Item	You select	Page
DOWNMIX	DOLBY SURROUND	91

- If the sound distorts even when the volume is turned down, set “AUDIO ATT” to “ON” (page 90).

B-2 **C-2** **D**

Item	You select	Page
DOWNMIX	DOLBY SURROUND	91
DIGITAL OUT	ON	91

Playing Discs

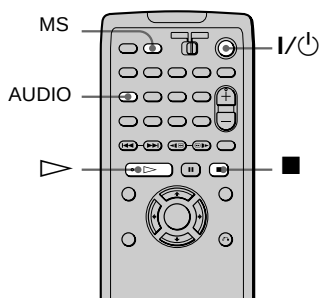
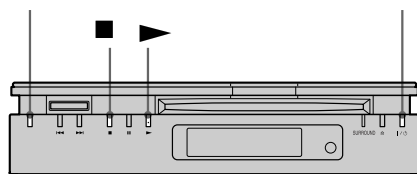
Playing Discs

DVD VIDEO DVD-RW VIDEO CD CD

When playing a disc, make sure that the MS indicator is turned off (Disc mode). To play a DATA-CD, see page 67.

Depending on the DVD or VIDEO CD, some operations may be different or restricted. Refer to the operating instructions supplied with your disc.

MS button/indicator I/⏻ button/indicator



1 Turn on your TV.

2 Switch the input selector on the TV to the player.

When using an amplifier (receiver)

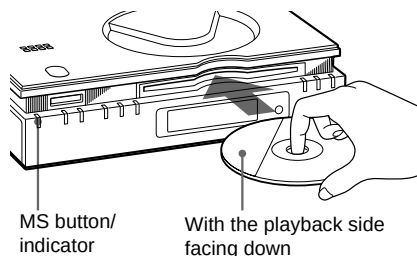
Turn on the amplifier (receiver) and select the appropriate channel.

3 Press I/⏻.

The I/⏻ indicator (red) changes to green and the front panel display lights up.

4 Insert a disc in the player.

If the MS indicator on the player is lit, press MS to turn it off in stop mode. (Disc mode)



5 Press ► on the player or ▷ on the remote.

The player starts playback (continuous play). Adjust the volume on the TV or the amplifier (receiver).

After following Step 5

Depending on the disc, a menu may appear on the TV screen. You can play the disc interactively by following the instructions on the menu. DVD (page 41), VIDEO CD (page 42).

To turn off the player

Press I/⏻. The player enters standby mode and the I/⏻ indicator lights up in red. To turn off the player completely, disconnect the AC power cord. While playing a disc, do not disconnect the AC power cord. Doing so may cancel the menu settings. When you turn off the player, first press ■ to stop playback and then press I/⏻.

Notes on playing DTS sound tracks on a CD

- When playing DTS-encoded CDs, excessive noise will be heard from the

analog stereo jacks. To avoid possible damage to the audio system, the consumer should take proper precautions when the analog stereo jacks of the player are connected to an amplification system. To enjoy DTS Digital Surround™ playback, an external 5.1-channel decoder system must be connected to the digital jack of the player.

- Set the sound to “STEREO” using the AUDIO button when you play DTS sound tracks on a CD (page 57).
- Do not play DTS sound tracks without first connecting the player to an audio component having a built-in DTS decoder. The player outputs the DTS signal via the DIGITAL OUT (OPTICAL) jack even if “DTS” in “AUDIO SETUP” is set to “OFF” in the Setup Display (page 92), and may affect your ears or cause your speakers to be damaged.

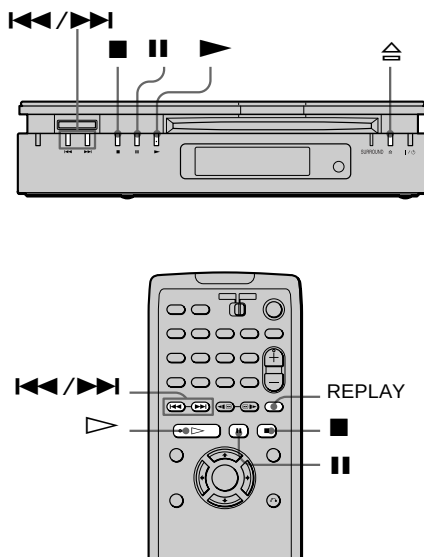
Notes on playing DVDs with a DTS sound track

- DTS audio signals are output only through the DIGITAL OUT (OPTICAL) jack.
- If you connect the player to audio equipment without a DTS decoder, do not set “DTS” to “ON” in “AUDIO SETUP” (page 92). A loud noise may come out from the speakers, affecting your ears or causing the speakers to be damaged.
- When you play a DVD with DTS sound tracks, set “DTS” to “ON” in “AUDIO SETUP” (page 92).

Notes

- When you insert an 8-cm (3-inch) disc, insert the disc slowly at the center of the disc slot. If you cannot eject the disc, consult your nearest Sony dealer.
- No adapter is required in order to play 8-cm (3-inch) discs on this player. If an adapter is used, damage to the player may result; therefore, never use an adapter when playing 8-cm (3-inch) discs.

Additional operations



To	Operation
Stop	Press ■
Pause	Press
Resume play after pause	Press or ▶ or ▶▶
Go to the next chapter, track, or scene in continuous play mode	Press ▶▶
Go back to the preceding chapter, track, or scene in continuous play mode	Press ◀◀
Stop play and remove the disc	Press ☒
Replay a previous scene (DVD only)	Press REPLAY

💡 The Replay function is useful when you want to review a scene or dialog that you missed.

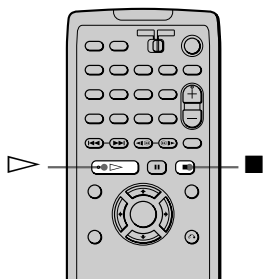
Note

You may not be able to use the Replay function with some scenes.

Resuming Playback from the Point Where You Stopped the Disc (Resume Play)

**Play) DVD VIDEO DVD-RW VIDEO CD CD
DATA-CD MS MGMS**

When you stop the disc, the player remembers the point where you pressed ■ and “RESUME” appears on the front panel display. As long as you do not remove the disc, Resume Play works even if the player enters standby mode by pressing I/⏻.



1 While playing a disc, press ■ to stop playback.

“RESUME” appears on the front panel display and you can restart the disc from the point where you stopped the disc. If “RESUME” does not appear, Resume Play is not available.

2 Press ▷.

The player starts playback from the point where you stopped the disc in Step 1.

Notes

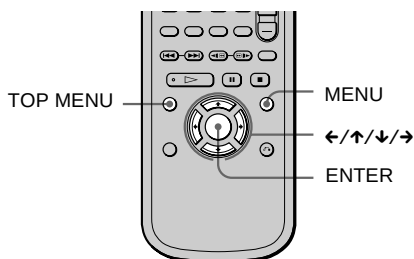
- Depending on where you stopped the disc, the player may not resume playback from exactly the same point.
- The point where you stopped playing is cleared when:
 - you disconnect the AC power cord.
 - you change the play mode.
 - you change the settings on the Setup Display.
 - you switch to MS mode.
 - the player enters standby mode (DATA-CD, “Memory Stick” and “MG Memory Stick” only)

 To play from the beginning of the disc, press ■ twice, then press ▷.

Using the DVD's Menu

DVD VIDEO

A DVD VIDEO is divided into long sections of a picture or a music feature called "titles." When you play a DVD VIDEO which contains several titles, you can select the title you want using the TOP MENU button. When you play DVD VIDEOS that allow you to select items such as the language for the subtitles and the language for the sound, select these items using the MENU button.



1 Press TOP MENU or MENU.

The disc's menu appears on the TV screen.

The contents of the menu vary from disc to disc.

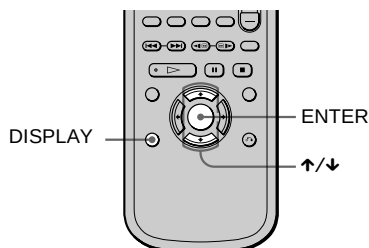
2 Press ←/↑/↓/→ to select the item you want to play or change.

3 Press ENTER.

Selecting "ORIGINAL" or "PLAY LIST" on a DVD-RW Disc

DVD-RW

Some DVD-RW discs in VR (Video Recording) mode have two types of titles for playback: originally recorded titles (ORIGINAL) and titles that can be created on recordable DVD players for editing (PLAY LIST). You can select the type of titles to be played.

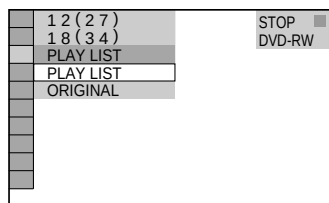


1 Press DISPLAY in stop mode.

The Control Menu appears.

2 Press ↑/↓ to select (ORIGINAL/PLAY LIST), then press ENTER.

The options for "ORIGINAL/PLAY LIST" appear.



3 Press $\uparrow/\downarrow$ to select the setting.

- **PLAY LIST:** plays the titles created from "ORIGINAL" for editing.
- **ORIGINAL:** plays the titles originally recorded.

4 Press ENTER.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

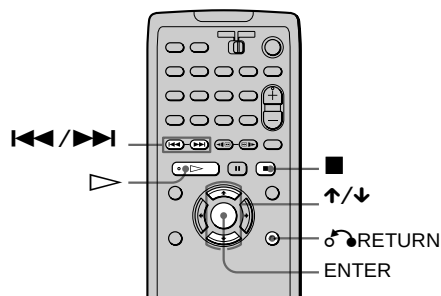
Note

This setting is canceled when you switch the player to MS mode.

Playing VIDEO CDs with PBC Functions (PBC Playback)

VIDEO CD

With PBC (Playback Control) functions, you can enjoy simple interactive operations, search functions, and other operations. PBC playback allows you to play VIDEO CDs interactively by following the menu on the TV screen.



1 Start playing a VIDEO CD with PBC functions.

The menu for your selection appears.

2 Select the item number you want by pressing $\uparrow/\downarrow$.

3 Press ENTER.

4 Follow the instructions in the menu for interactive operations.

Refer to the instructions supplied with the disc, as the operating procedure may differ according to the VIDEO CD.

To go back to the menu

Press $\curvearrowright$ RETURN.

To play without using PBC, press $\lll/\ggg$ while the player is stopped to select a track, then press $\triangleright$ or ENTER.

“Play without PBC.” appears on the TV screen and the player starts continuous play. You cannot play still pictures such as a menu.

To return to PBC playback, press **■** twice then press **▷**.

Note

Depending on the VIDEO CD, “Press ENTER” in Step 3 may appear as “Press SELECT” in the instructions supplied with the disc. In this case, press **▷**.

Various Play Mode Functions (Program Play, Shuffle Play, Repeat Play, A-B Repeat Play)

You can set the following play modes:

- Program Play (page 44)
- Shuffle Play (page 46)
- Repeat Play (page 46)
- A-B Repeat Play (page 47)

Note

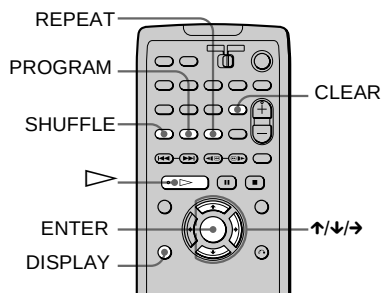
The play mode is canceled when:

- you eject the disc.
- the player enters standby mode by pressing **I/⏻**.
- you press **MS**.

Creating your own program (Program Play)

DVD VIDEO VIDEO CD CD

You can play the contents of the discs in the order you want by arranging the order of the titles, chapters, or tracks to create your own program. You can program up to 99 titles, chapters, and tracks.

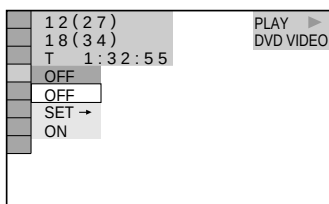


1 Press **DISPLAY** twice (once for CD).

The Control Menu is displayed.

2 Press **↑/↓** to select **(PROGRAM)**, then press **ENTER**.

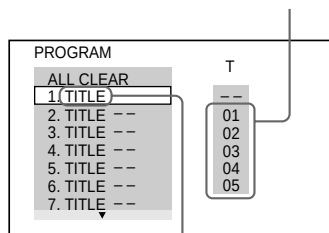
The options for “PROGRAM” appear.



3 Press **↑/↓** to select “**SET→**,” then press **ENTER**.

The display for programming appears.

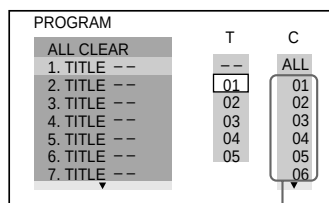
Tracks or titles recorded on a disc



“TRACK” is displayed when you play a VIDEO CD or a CD

4 Press **→**.

The cursor moves to the title or track (in this case, “01”).



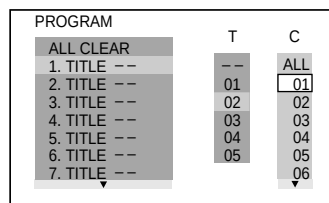
Chapters recorded on a disc

5 Select the title, chapter, or track you want to program.

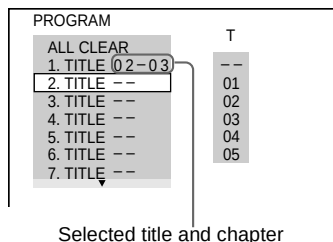
■ When playing a DVD VIDEO

For example, select chapter “03” of title “02.”

Press **↑/↓** to select “02” under “T,” then press **ENTER**.



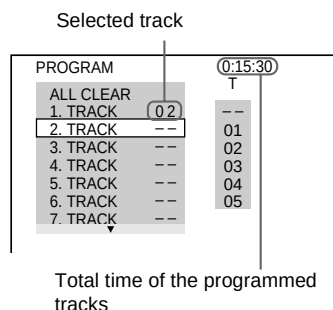
Next, press $\uparrow/\downarrow$ to select "03" under "C," then press ENTER.



■ When playing a VIDEO CD or CD

For example, select track "02."

Press $\uparrow/\downarrow$ to select "02" under "T," then press ENTER.



6 To program other titles, chapters, or tracks, repeat Steps 4 to 5.

The programmed titles, chapters, and tracks are displayed in the selected order.

7 Press $\triangleright$ to start Program Play.

Program Play begins.

When the program ends, you can restart the same program again by pressing $\triangleright$.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

To change or cancel a program

- 1 Follow Steps 1 through 3 of "Creating your own program (Program Play)."
- 2 In Step 4, select the program number of the title, chapter, or track you want to change or cancel using $\uparrow/\downarrow$, and press $\rightarrow$.
- 3 Follow Step 5 for new programming. To cancel a program, select "--" under "T," then press ENTER.

To cancel all the titles, chapters, or tracks in the programmed order

- 1 Follow Steps 1 through 3 of "Creating your own program (Program Play)."
- 2 Press $\uparrow$ and select "ALL CLEAR."
- 3 Press ENTER.

You can do Repeat Play or Shuffle Play of the programmed titles, chapters, or tracks by pressing REPEAT or SHUFFLE during Program Play. Or activate "REPEAT" or "SHUFFLE" on the Control Menu during Program Play.

You can select "PROGRAM" directly by pressing PROGRAM.

To return to normal play

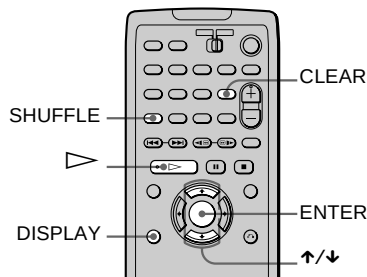
Press CLEAR, or select "OFF" in Step 3.

To play the same program again, select "ON" in Step 3 and press $\triangleright$.

Playing in random order (Shuffle Play)

DVD VIDEO VIDEO CD CD

You can have the player “shuffle” titles, chapters, or tracks and play them in a random order. Subsequent “shuffling” may produce a different playing order.

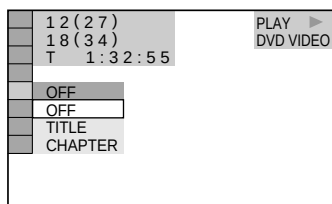


1 Press DISPLAY twice (once for CD) during playback.

The Control Menu is displayed.

2 Press ↑/↓ to select (SHUFFLE), then press ENTER.

The options for “SHUFFLE” appear.



3 Press ↑/↓ to select the item.

■ During Program Play

- **TITLE:** Shuffles titles and plays them in random order.
- **CHAPTER:** Shuffles chapters and plays them in random order.

■ When playing a VIDEO CD or CD

- **TRACK:** Shuffles tracks and plays them in random order.

■ During Program Play

- **ON:** Shuffles titles or tracks selected in Program Play and plays them in random order.

4 Press ENTER.

To return to normal play

Press CLEAR or select “OFF” in Step 3.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

💡 You can set the player to “shuffle” in stop mode as well. After pressing SHUFFLE to select the item you want to set, press ▷. Shuffle Play starts.

💡 You can select “SHUFFLE” directly by pressing SHUFFLE. Each time you press the button the item changes.

Note

Up to 200 chapters in a disc can be played in random order when “CHAPTER” is selected.

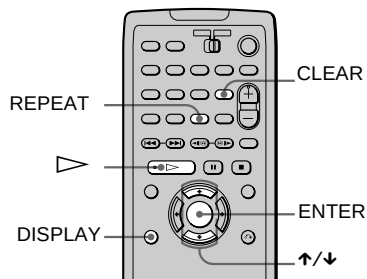
Playing repeatedly (Repeat Play)

DVD VIDEO DVD-RW VIDEO CD CD DATA-CD

MGMS

You can play all of the titles or tracks on a disc or “MG Memory Stick,” or a single title, chapter, album, or track repeatedly.

You can use a combination of Shuffle or Program Play modes.

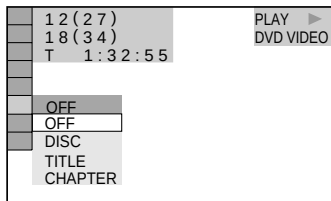


1 Press DISPLAY twice (once for CD/DATA-CD/ "MG Memory Stick") during playback.

The Control Menu is displayed.

2 Press ↑/↓ to select (REPEAT), then press ENTER.

The options for "REPEAT" appear.



3 Press ↑/↓ to select the item.

■ When playing a DVD VIDEO

- DISC: Repeats all of the titles.
- TITLE: Repeats the current title on a disc.
- CHAPTER: Repeats the current chapter.

■ When playing a DVD-RW

- DISC: Repeats all of the titles in the selected type of titles (ORIGINAL/PLAY LIST). (page 41)
- TITLE: Repeats the current title on a disc.
- CHAPTER: Repeats the current chapter.

■ When playing a VIDEO CD or CD

- DISC: Repeats all of the tracks on a disc.
- TRACK: Repeats the current track.

■ When playing MP3 audio on a DATA-CD

- DISC: Repeats all of the albums on a disc.
- ALBUM: Repeats the current album.
- TRACK: Repeats the current track.

■ When playing ATRAC3 audio tracks on an "MG Memory Stick"

- ALL: Repeats all of the tracks.

- TRACK: Repeats the current track.

■ During Program Play or Shuffle Play

- ON: Repeats Program Play or Shuffle Play.

4 Press ENTER.

To return to normal play

Press CLEAR, or select "OFF" in Step 3.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

 You can set the player to "repeat" in stop mode as well. After pressing REPEAT to select the item you want to set, press . Repeat Play starts.

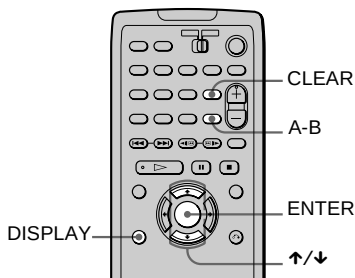
 You can select "REPEAT" directly by pressing REPEAT.

 You cannot repeat JPEG image files.

Repeating a specific portion (A-B Repeat Play)

DVD VIDEO DVD-RW VIDEO CD CD

You can play a specific portion of a title, chapter, or track repeatedly. (This function is useful when you want to memorize lyrics, etc.)

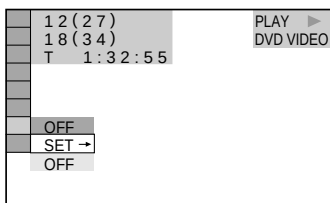


1 Press DISPLAY twice (once for CD).

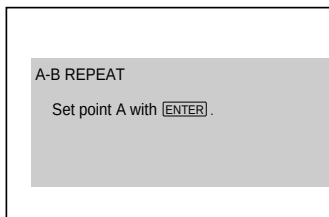
The Control Menu is displayed.

continued →

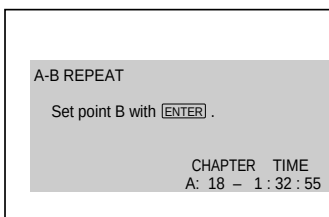
-
- 2** Press $\uparrow/\downarrow$ to select  (A-B REPEAT), then press ENTER.
The options for “A-B REPEAT” appear.



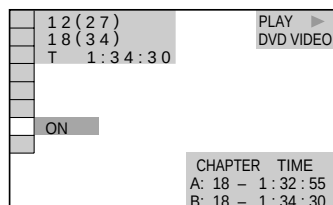
-
- 3** Press $\uparrow/\downarrow$ to select “SET $\rightarrow$,” then press ENTER.
The “A-B REPEAT” setting display appears.



-
- 4** During playback, when you find the starting point (point A) of the portion to be played repeatedly, press ENTER.
The starting point (point A) is set.



-
- 5** When you reach the ending point (point B), press ENTER again.
The set points are displayed and the player starts repeating this specific portion.
“A-B” appears on the front panel display during A-B Repeat Play.



To return to normal play

Press CLEAR, or select “OFF” in Step 3.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

 You can select “A-B REPEAT” directly by pressing A-B. Press the button once to set the point A, and press it again to set the point B.

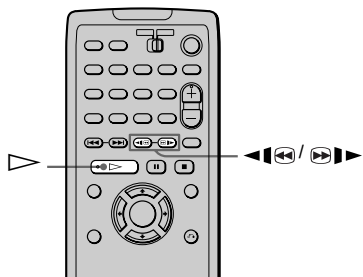
Notes

- You can set A-B Repeat Play for only one specific section.
- When you set A-B Repeat Play, the settings for Shuffle Play, Repeat Play, and Program Play are canceled.
- A-B Repeat Play does not work for titles containing still pictures on a DVD-RW in VR mode.
- A-B Repeat Play does not work crossing different titles (“ORIGINAL” or “PLAY LIST”) on a DVD-RW in VR mode.

Searching for a Scene

Searching for a Particular Point on a Disc or a “MG Memory Stick” (Scan, Slow-motion Play)

You can locate a particular point on a disc quickly by monitoring the picture or playing back slowly.



Note

Depending on the DVD/VIDEO CD, you may not be able to do some of the operations described.

Locating a point quickly by playing a disc in fast forward or fast reverse (Scan)

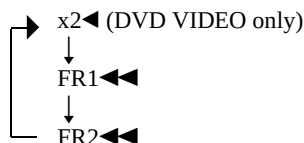
DVD VIDEO DVD-RW VIDEO CD CD DATA-CD MGMS

Press **◀◀** or **▶▶** while playing a disc. When you find the point you want, press **▷** to return to normal speed. Each time you press **◀◀** or **▶▶** during scan, the playback speed changes. Three speeds are available. With each press the indication changes as follows:

Playback direction



Opposite direction



The “x2▶”/ “x2◀” playback speed is about twice the normal speed.

The “FF2▶▶”/ “FR2◀◀” playback speed is faster than “FF1▶▶”/ “FR1◀◀.”

💡 You cannot view JPEG image files in fast forward or fast reverse.

Watching frame by frame (Slow-motion Play)

DVD VIDEO DVD-RW VIDEO CD

Press **◀◀** or **▶▶** when the player is in pause mode. To return to the normal speed, press **▷**.

Each time you press **◀◀** or **▶▶** during Slow-motion Play, the playback speed changes. Two speeds are available. With each press the indication changes as follows:

Playback direction

SLOW2▶▶ ↔ SLOW1▶▶

Opposite direction (DVD VIDEO only)

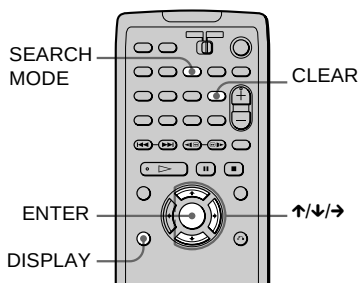
SLOW2◀◀ ↔ SLOW1◀◀

The “SLOW2▶▶”/ “SLOW2◀◀” playback speed is slower than “SLOW1▶▶”/ “SLOW1◀◀.”

Searching for a Title/Chapter/Track/Index/Scene, etc. (Search mode)

DVD VIDEO DVD-RW VIDEO CD CD DATA-CD
MS MGMS

You can search a DVD disc by title or chapter, and you can search a VIDEO CD or CD by track, index, or scene. You can search an audio track or image on a DATA-CD or “Memory Stick” by album, track, or file. As title and tracks are assigned unique numbers on the disc or “Memory Stick,” you can select the desired one by entering its number. Or, you can search for a scene using the time code.

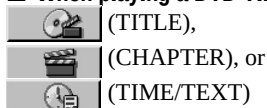


1 Press DISPLAY.

The Control Menu appears.

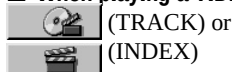
2 Press ↑/↓ to select the search method.

■ When playing a DVD VIDEO/DVD-RW



Select “TIME/TEXT” for “Time search” (see below).

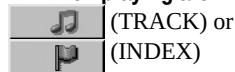
■ When playing a VIDEO CD



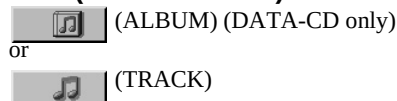
■ When playing a VIDEO CD with PBC Playback



■ When playing a CD



■ When playing an audio on a DATA-CD (MP3 audio track) or “MG Memory Stick” (ATRAC3 audio track)



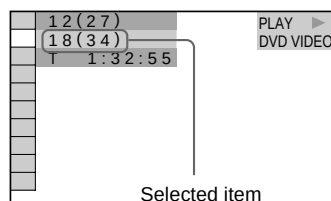
■ When viewing a JPEG image file on a DATA-CD or “Memory Stick”



Example: when you select (CHAPTER)

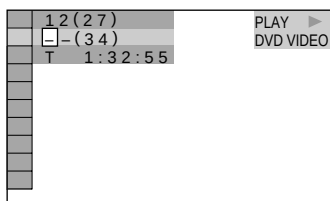
“** (**)” is selected (** refers to a number).

The number in parentheses indicates the total number of titles, chapters, tracks, indexes, scenes, albums or files.



3 Press ENTER.

“** (**)” changes to “-- (**).”



4 Select the number of the title, track, scene, etc., you want by pressing $\uparrow/\downarrow$ to select the digit, following by $\rightarrow$ to move the cursor.

If you make a mistake

Cancel the number by pressing CLEAR, then select another number.

5 Press ENTER.

The player starts playback from the selected number.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

To search for a scene using the time code (Time search) (DVD VIDEO/DVD-RW only)

1 In Step 2, select  (TIME/TEXT).
“T **:*:~:~:~” (playing time of the current title) is selected.

2 Press ENTER.
“T **:*:~:~:~” changes to “T --:~:~:~.”

3 Input the time code using $\uparrow/\downarrow/\rightarrow$, then press ENTER.
For example, to find the scene at 2 hours, 10 minutes, and 20 seconds after the beginning, just enter “2:10:20.”

 When the Control Menu display is turned off, you can search for a chapter, or track, etc. by pressing SEARCH MODE followed by $\uparrow/\downarrow/\rightarrow$ and ENTER.

Notes

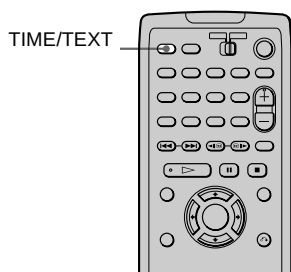
- When you search a DATA-CD or “Memory Stick,” the number you should input is different from the numbers included in the album, track or file name. Input the album, track or file number indicating the recording order on the DATA-CD or “Memory Stick.”
- You cannot search for a still image on a DVD-RW in VR mode.

Viewing Information About the Disc

Viewing the Playing Time and Remaining Time on the Front Panel Display

DVD VIDEO DVD-RW VIDEO CD CD DATA-CD
MGMS

You can check information about the disc, such as the remaining time, current number of title of a DVD VIDEO/DVD-RW, or track of a CD or VIDEO CD, using the front panel display (page 11).



Press TIME/TEXT.

Each time you press TIME/TEXT while playing the disc, the display changes as shown in the following charts.

When playing a DVD VIDEO/DVD-RW

Playing time of the current title

T HOUR 1 MIN 03 SEC 24

Remaining time of the current title

T- HOUR 1 MIN 15 SEC 36

Playing time of the current chapter

C HOUR 0 MIN 22 SEC 30

Remaining time of the current chapter

C- HOUR 0 MIN 13 SEC 20

Text

SONY HI

Current title and chapter number

TITLE 1 CHAP 24

Automatically

When playing a VIDEO CD (without PBC functions) or CD

Track playing time and the current track number

TRACK	MIN	SEC
6	2	25

Remaining time of the current track

TRACK	MIN	SEC
6	-1	50

Playing time of the disc

MIN	SEC
32	12

Remaining time of the disc

MIN	SEC
-20	18

Text

SONY HI

Current track and index number

TRACK	INDEX
24	18

Automatically

Notes

- Depending on the type of disc being played and the playing mode, the above mentioned disc information may not be displayed.
- Playing time of MP3 audio track may not be displayed correctly.

When playing a DATA-CD (MP3 audio track) or “MG Memory Stick” (ATRAC3 audio track)

Current track number and playing time

TRACK	MIN	SEC
6	2	25

Name of the current track

HAPPY B

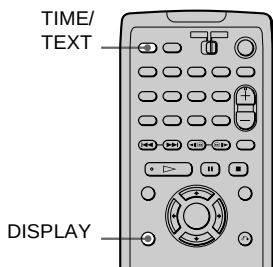
💡 When playing VIDEO CDs with PBC functions, the scene number or the playing time is displayed.

💡 The playing time and remaining time of the current chapter, title, track, scene, or disc will also appear on your TV screen. See the following section “Checking the Playing Time and Remaining Time” for instructions on how to read this information.

Checking the Playing Time and Remaining Time

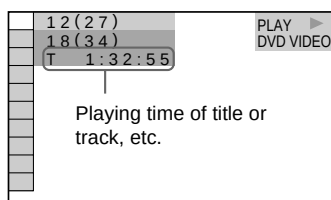
DVD VIDEO DVD-RW VIDEO CD CD DATA-CD
MS MGMS

You can check the playing time and remaining time of the current title, chapter, or track, and the playing time or remaining time of the disc, etc. Also, you can check the title of music or image recorded on a disc or “Memory Stick” such as DVD/CD texts.



1 Press DISPLAY during playback.

The Control Menu is displayed.



2 Press TIME/TEXT repeatedly to change the time information.

The display and the kinds of time that you can change depend on the disc you are playing.

■ When playing a DVD VIDEO/DVD-RW

- T **:**:**
Playing time of the current title (hour:minute:second)
- T-**:**:**
Remaining time of the current title

- C **:**:**
Playing time of the current chapter
- C-**:**:**
Remaining time of the current chapter

■ When playing a VIDEO CD (with PBC functions)

- **:**:**
Playing time of the current scene (minute:second)

■ When playing a VIDEO CD (without PBC functions) or CD

- T **:**:**
Playing time of the current track (minute:second)
- T-**:**:**
Remaining time of the current track
- D **:**:**
Playing time of the current disc
- D-**:**:**
Remaining time of the current disc

■ When playing a DATA-CD (MP3 audio) or “MG Memory Stick” (ATRAC3 audio track)

- ****:**:**
Playing time of the current track (minute:second)

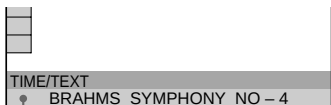
To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

💡 When viewing a JPEG image file on a DATA-CD or “Memory Stick,” recorded date will be displayed.

Checking the DVD/CD text

Press TIME/TEXT repeatedly in Step 2. If a text (title of music or image on a disc or “Memory Stick”) is recorded, the text appears on the front panel display or TV screen. If no text is recorded, “NO TEXT” appears.



Text (The track or file name is displayed when playing a DATA-CD or "Memory Stick.")

💡 If the text does not fit on a single line, you can see the entire text by watching it scroll across the front panel display.

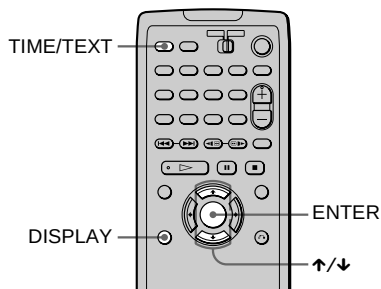
💡 You can select the time and text directly by pressing TIME/TEXT.

Notes

- Only letters of the alphabet can be displayed.
- This player can only display the first level of text, such as the title.

Checking the Play Information

You can check information such as the bit rate or the DVD layer that is being played. While playing a disc, an approximate bit rate of the playback picture is always displayed as Mbps (Mega bit per second) and the audio as kbps (kilo bit per second).

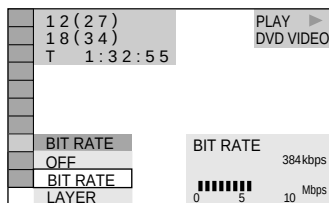


Checking the play information of DVD (ADVANCED)

DVD VIDEO DVD-RW

1 Press **DISPLAY** during playback.
The Control Menu is displayed.

2 Press **↑/↓** to select **BIT RATE** (ADVANCED), then press **ENTER**.
The options for "ADVANCED" appear.



continued ➔

3 Press **↑/↓** to select items.

For each item, please refer to “Displays of each item.”

- **BIT RATE**: displays the bit rate.
- **LAYER**: displays the layer and the pick-up point.

4 Press **ENTER**.

To close the **ADVANCED** window

Select “OFF” in Step 3.

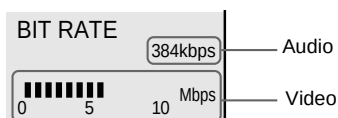
To turn off the **Control Menu**

Press **DISPLAY** repeatedly until the Control Menu is turned off.

Display of each item

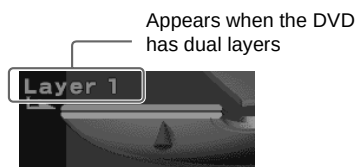
By pressing **DISPLAY** repeatedly, you can display either “**BIT RATE**” or “**LAYER**,” whichever was selected in “**ADVANCED**.”

BIT RATE



Bit rate refers to the amount of video/audio data per second in a disc. The higher the bit rate, the larger the amount of data. When the bit rate level is high, there is a large amount of data. However, this does not always mean that you can get higher quality pictures or sounds.

LAYER



Indicates the approximate point where the disc is playing.

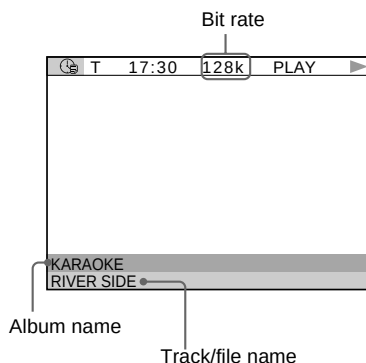
If it is a dual-layer DVD, the player indicates which layer is being read (“Layer 0” or “Layer 1”).

For details on the layers, see page 97 (DVD VIDEO).

Checking the play information of **DATA-CD** or “**MG Memory Stick**”

DATA-CD **MGMS**

By pressing **TIME/TEXT** while playing MP3 audio track on a **DATA-CD** or **ATRAC3** audio track on an “**MG Memory Stick**” you can display the audio bit rate (the amount of data per second of the current audio).

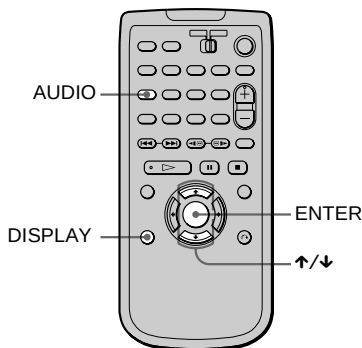


Changing the Sound

DVD VIDEO DVD-RW VIDEO CD CD DATA-CD
MGMS

If the DVD VIDEO is recorded with multilingual tracks, you can select the language you want while playing the disc. If the DVD VIDEO is recorded in multiple audio formats (PCM, Dolby Digital, or DTS), you can select the audio format you want while playing the disc.

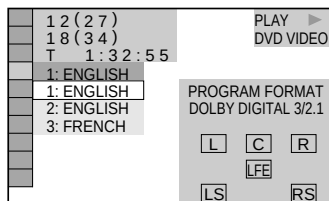
With stereo CDs, DATA-CDs, VIDEO CDs or “MG Memory Stick,” you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers. (In this case, the sound loses its stereo effect.) For example, when playing a disc containing a song with the vocals on the right channel and the instruments on the left channel, you can select the left channel and hear the instruments from both speakers.



- 1 Press DISPLAY during playback.**
The Control Menu is displayed.

- 2 Press ↑/↓ to select (AUDIO), then press ENTER.**

The options for “AUDIO” appear.



- 3 Press ↑/↓ to select the desired audio signal.**

■ When playing a DVD VIDEO

Depending on the DVD VIDEO, the choice of language varies. When 4 digits are displayed, they represent the language code. Refer to the language code list on page 101 to see which language the code represents. When the same language is displayed two or more times, the disc is recorded in multiple audio formats.

■ When playing a DVD-RW

The types of sound tracks recorded on a disc are displayed. The default setting is underlined.

Example:

- 1: MAIN (main sound)
- 1: SUB (sub sound)
- 1: MAIN+SUB (main and sub sound)

■ When playing a VIDEO CD, CD, DATA-CD (MP3 audio) or “MG Memory Stick” (ATRAC3 audio track)

The default setting is underlined.

- STEREO: The standard stereo sound
- 1/L: The sound of the left channel (monaural)
- 2/R: The sound of the right channel (monaural)

4 Press ENTER.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

 You can select "AUDIO" directly by pressing AUDIO. Each time you press the button, the item changes.

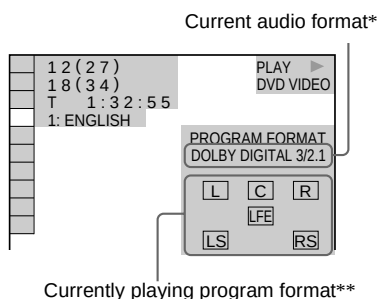
Notes

- For discs not in multiple audio format, you cannot change the sound.
- While playing a DVD, the sound may change automatically.

Displaying the audio information of the disc

DVD VIDEO

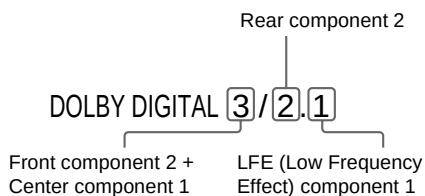
When you select "AUDIO," the channels being played are displayed on the screen. For example, in Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD VIDEO. Depending on the DVD VIDEO, the number of the recorded channels may differ.



* "PCM," "DTS," or "DOLBY DIGITAL" is displayed.

In the case of "DOLBY DIGITAL," the channels in the playing track are displayed by numbers as follows:

For Dolby Digital 5.1ch:



**The letters in the program format display mean the following sound component.

- L: Front (left)
- R: Front (right)
- C: Center
- LS: Rear (left)
- RS: Rear (right)
- S: Rear (monaural): The rear component of the Dolby Surround processed signal and the Dolby Digital signal

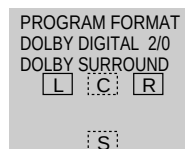
LFE: Low Frequency Effect signal

The display examples are as follows:

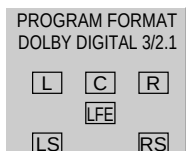
- PCM (stereo)



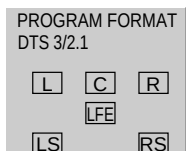
- Dolby Surround



- Dolby Digital 5.1ch
“LFE” is enclosed in a solid line even if an LFE signal component is not output.



- DTS
“LFE” is enclosed in a solid line even if an LFE signal component is not output.



💡 When the signal contains rear signal components such as “LS,” “RS” or “S,” the Surround effect is enhanced (page 59).

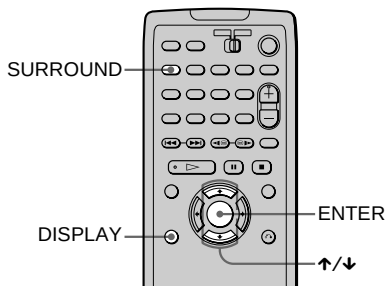
Note

If “DTS” is set to “OFF” in “AUDIO SETUP,” the DTS track selection option will not appear on the screen even if the disc contains DTS tracks (page 92).

TV Virtual Surround Settings (TVS)

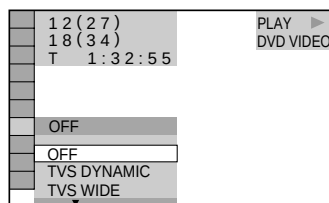
DVD VIDEO DVD-RW VIDEO CD CD DATA-CD
MGMS

When you connect a stereo TV or 2 front speakers, TV Virtual Surround lets you enjoy surround sound effects by using sound imaging to create virtual rear speakers from the sound of the front speakers (L: left, R: right) without using actual rear speakers. This function is designed to work with the AUDIO OUT L/R jacks. Note that if you select one of the TVS settings while playing a DVD, the player does not output the Dolby Digital signals from the DIGITAL OUT (OPTICAL) jack (when you set “DOLBY DIGITAL” in “AUDIO SETUP” to “D-PCM”) (page 92).



1 Press DISPLAY during playback.
The Control Menu appears.

2 Press ↑/↓ to select  (TVS), then press ENTER.
The options for “TVS” appear.



continued →

3 Press $\uparrow/\downarrow$ to select one of the TVS (TV Virtual Surround) sounds.

Refer to the explanations given for each item.

- TVS DYNAMIC
- TVS WIDE
- TVS NIGHT
- TVS STANDARD

4 Press ENTER.

To reset the TVS setting

In Step 3, select “OFF.”

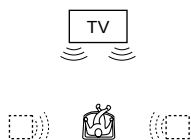
To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

TVS DYNAMIC

Uses sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. The virtual speakers are reproduced as shown in the illustration below. The sound imaging effect is distinct and clearly reproduces each aural element of the audio track.

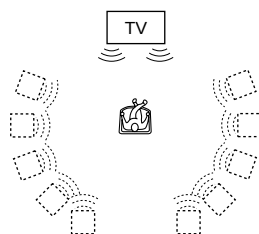
This mode is effective when the distance between the front L and R speakers is short, such as with built-in speakers on a stereo TV.



TVS WIDE

Uses sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. The virtual speakers are reproduced as shown in the illustration below. This gives the sound an expanded effect that fills the area surrounding the listener.

This mode is effective when the distance between the front L and R speakers is short, such as with built-in speakers on a stereo TV.

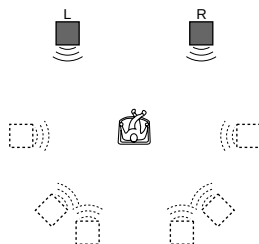


TVS NIGHT

The large sounds, such as explosions, are suppressed, but the quieter sounds are unaffected. This feature is useful when you do not want to disturb other people but still want to hear the dialog and enjoy the surround sound effects of “TVS WIDE.”

TVS STANDARD

Uses sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. The virtual speakers are reproduced as shown in the illustration below. Use this setting when you want to use TVS with 2 separate speakers and retain the sound quality.



L: Left front speaker

R: Right front speaker

: Virtual speakers

💡 You can select “TVS” directly by pressing SURROUND. Each time you press the button, the item changes. If you select any setting other than “OFF,” the SURROUND indicator on the player lights up.

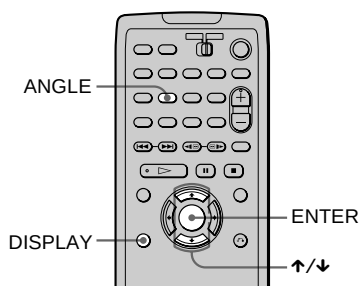
Notes

- When you select an effect, the sound cuts off for a moment.
- When the playing signal does not contain a signal for the rear speakers (page 58), the surround effects may be difficult to hear.
- When you select one of the TVS modes, turn off the surround setting of the connected TV or amplifier (receiver).
- Make sure that your listening position is between and at an equal distance from your speakers, and that the speakers are located in similar surroundings. Otherwise, the TVS effect may be hard to discern.
- “TVS NIGHT” works only with Dolby Digital audio. However, not all discs will respond to the “TVS NIGHT” function in the same way.
- If you set “DOLBY DIGITAL” to “DOLBY DIGITAL,” or “DTS” to “ON” (page 91), sound will come from the DIGITAL OUT (OPTICAL) jack but it will not have the TVS effect.

Changing the Angles

DVD VIDEO

If various angles (multi-angles) for a scene are recorded on the DVD VIDEO, “ANGLE” appears on the front panel display. This means that you can change the viewing angle. For example, while playing a scene of a train in motion, you can display the view from either the front of the train, the left window of the train, or from the right window without having the train’s movement interrupted.

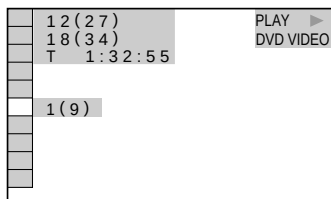


1 Press DISPLAY during playback.

The Control Menu appears.

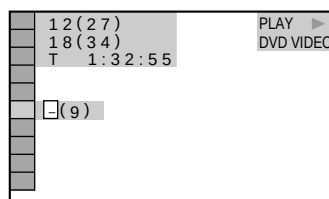
2 Press UP/DOWN to select (ANGLE).

The number of the angle appears.
The number in parentheses indicates the total number of angles.



3 Press → or ENTER.

The number of the angle changes to “-.”



4 Select the angle number using UP/DOWN, then press ENTER.

The scene changes to the selected angle.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

You can select the angle directly by pressing ANGLE. Each time you press the button, the angle changes.

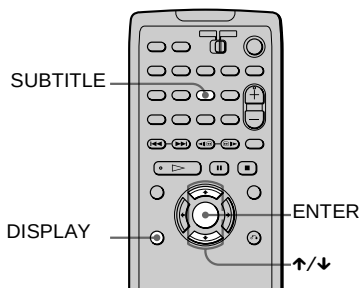
Note

Depending on the disc, you may not be able to change the angles even if multi-angles are recorded on the disc.

Displaying the Subtitles

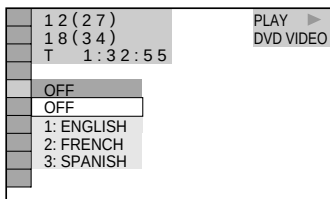
DVD VIDEO DVD-RW

If subtitles are recorded on the disc, you can turn the subtitles on and off whenever you want while playing. If multilingual subtitles are recorded on the disc, you can change the subtitle language while playing, and turn it on or off whenever you want. For example, you can select the language you want to practice and turn the subtitles on for better understanding.



1 Press DISPLAY during playback.
The Control Menu appears.

2 Press ↑/↓ to select (SUBTITLE), then press ENTER.
The options for “SUBTITLE” appear.



3 Press ↑/↓ to select the setting.

■ **When playing a DVD VIDEO**

Select the language.

Depending on the DVD VIDEO, the choice of language varies.

When 4 digits are displayed, they indicate the language code. Refer to the language code list on page 101 to see which language the code represents.

■ **When playing a DVD-RW**
Select “ON.”

4 Press ENTER.

To cancel the SUBTITLE setting

Select “OFF” in Step 3.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

💡 You can select “SUBTITLE” directly by pressing SUBTITLE. Each time you press the button, the item changes.

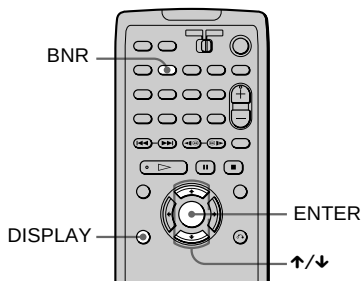
Note

Depending on the disc, you may not be able to change the subtitles even if multilingual subtitles are recorded on it.

Adjusting the Picture Quality (BNR)

DVD VIDEO DVD-RW VIDEO CD

The Block Noise Reduction (BNR) function adjusts the picture quality by reducing the “block noise” or mosaic like patterns that appear on your TV screen.

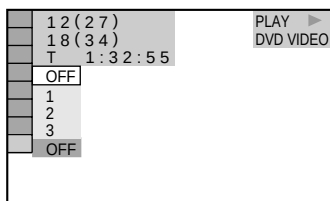


1 Press DISPLAY twice during playback.

The Control Menu appears.

2 Press ↑/↓ to select (BNR), then press ENTER.

The options for “BNR” appear.



3 Press ↑/↓ to select a level.

As the value increases, the mosaic like patterns on your TV screen will decrease.

- 1: reduces the “block noise”.
- 2: reduces the “block noise” more than 1.
- 3: reduces the “block noise” more than 2.

4 Press ENTER.

The disc plays with the setting you selected.

To cancel the BNR setting

Select “OFF” in Step 3.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

 You can select “BNR” directly by pressing BNR. Each time you press the button, the level changes.

Notes

- If the outlines of the images on your screen should become blurred, set “BNR” to “OFF.”
- Depending on the disc or the scene being played, the “BNR” effect may be hard to discern.

Playing a DATA-CD

About MP3 Audio Tracks and JPEG Image Files

What is MP3/JPEG?

MP3 is audio compression technology that satisfies the ISO/MPEG regulations. JPEG is image compression technology.

Discs that the player can play

You can play MP3 audio tracks or JPEG image files on CD-ROMs, CD-Rs or CD-RWs (DATA-CD). However, the discs must be recorded according to ISO9660 level 1, level 2 or Joliet format for the player to recognize the tracks (or files).

You can also play discs recorded in Multi Session.

See the instructions supplied with the CD-R/CD-RW drives and the recording software (not supplied) for details on the recording format.

Note on the multi-session disc

If MP3 audio tracks or JPEG image files are recorded in the first session, the player will play MP3 audio tracks or JPEG image files also in other sessions.

If audio tracks and images in Music CD format or Video CD format are recorded in the first session, only the first session will be played back.

Note

Since the player cannot play the discs created in the Packet Write format, you cannot view the JPEG images recorded using the following Sony products (as of February, 2002):

- Digital Photo Printer DPP-SV88
- Digital Still Camera MVC-CD1000, MVC-CD200, MVC-CD300

MP3 audio track or JPEG image file that the player can play

The player can play the MP3 audio tracks or JPEG image files:

- which have extension “.MP3” (MP3 audio track) or “.JPG” (JPEG image file)
- which conform to the DCF* image file format

* “Design rule for Camera File system”: Image standards for digital cameras regulated by Japan Electronic Industries Development Association (JEIDA)

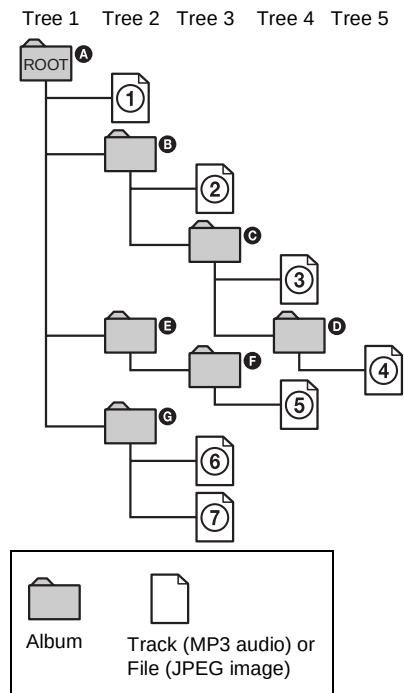
Notes

- The player will play any data with the extension “.MP3” or “.JPG,” even if they are not in MP3 or JPEG format. Playing this data may generate a loud noise which could damage your speaker system.
- The player does not conform to audio in MP3PRO format.

Playback order of MP3 audio tracks or JPEG image files

The albums, MP3 audio tracks, or JPEG image files recorded in a DATA-CD will be played as follows:

Structure of disc contents



When you insert a DATA-CD and press $\triangleright$, the numbered tracks (or files) are played sequentially, from ① through ⑦. Any sub-albums/tracks (or files) contained within a currently selected album take priority over the next album in the same tree. (Example: **C** contains **D** so ④ is played before ⑤.)

When you press MENU and the list of album names appears (page 67), the album names are arranged in the following order: **A** → **B** → **C** → **D** → **F** → **G**. Albums that do not contain tracks (or files) (such as album **E**) do not appear in the list.

💡 If you add numbers (01, 02, 03, etc.) to the front of the track/file names when you store the tracks (or files) in a disc, the tracks and files will be played in that order.

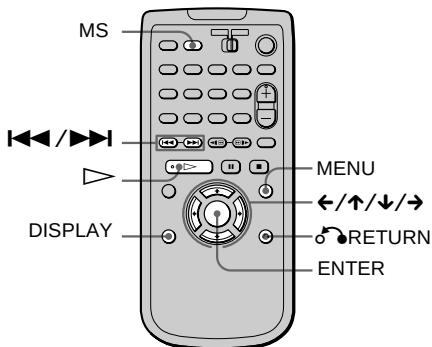
💡 Since a disc with many trees takes longer to start playback, place your albums within the first two trees when you store the tracks (or files) in a disc.

Notes

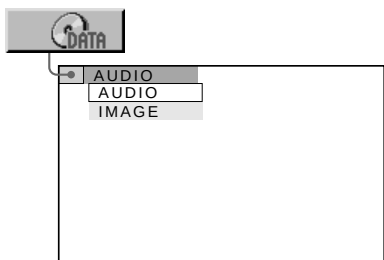
- Depending on the software you use to create the DATA-CD, the playback order may differ from the above illustration.
- The playback order above may not be applicable if there are more than 999 albums and tracks (or files) in the DATA-CD.
- The player can recognize up to 499th album (the player will count just albums, including albums that do not contain MP3 audio tracks and JPEG image files). The player will not play any albums beyond the first 499 album. Of the first 499 albums, the player will play no more than a combined total of 999 albums and tracks (or files).

DATA-CD

MP3 audio tracks recorded on DATA-CDs (CD-ROM, CD-R, CD-RW) can be played on this player.



- 1 Insert a DATA-CD into the disc slot.**
(If the MS indicator on the player is lit, press MS to turn it off in stop mode.)
The Control Menu appears if an MP3 audio tracks or JPEG image file is recorded on the DATA-CD.



- 2** Press **↑/↓** to select **"AUDIO."**

- 3** Press  or ENTER.

The first MP3 audio track recorded on the DATA-CD is played back.

To play the next or previous track

Press **▶▶** or **◀◀**.

 You can view the disc information (page 52) or scan (page 49) while playing MP3 audio tracks. You can also activate Repeat Play (page 46), “AUDIO” (page 57), and “TVS” (page 59).

 You can also use **▶▶** or **◀◀** on the player to select “AUDIO” in Step 2.

 If you want to view JPEG image files after playing MP3 audio tracks, press **DISPLAY** to display the Control Menu. Select  using **↑/↓**, then press **ENTER**. Follow from **Step 2** of “Viewing a JPEG Image File” on page 68.

Note

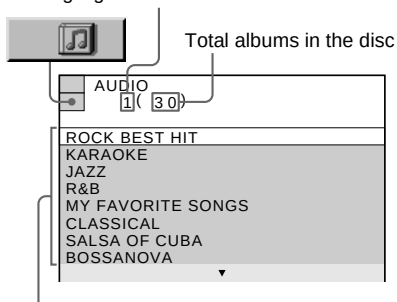
The ID3 tag, which is the memory area partitioned in MP3 audio for inputting music titles, etc., cannot be displayed.

Selecting an album and track

- 1** After Step 3 in “Playing an MP3 Audio Track,” press MENU.

The albums recorded on the DATA-CD appear. When an album is being played, its title is shaded.

Highlighted album number



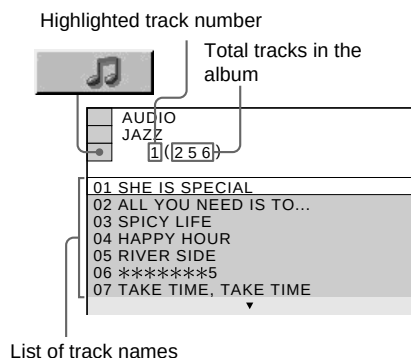
List of album names

Playing a DATA-CD

continued →

2 Press $\uparrow/\downarrow$ to select the album you want to play, then press ENTER.

Tracks in the album appear. When a track is being played, its title is shaded.



3 Press $\uparrow/\downarrow$ to select the track, then press ENTER.

The player starts playing the selected track.

To go to the next or previous page

Press $\rightarrow$ or $\leftarrow$.

To return to the previous display

Press $\hookrightarrow$ RETURN.

To turn off the display

Press MENU.

By pressing MENU, you can display the album list when the player is stopped.

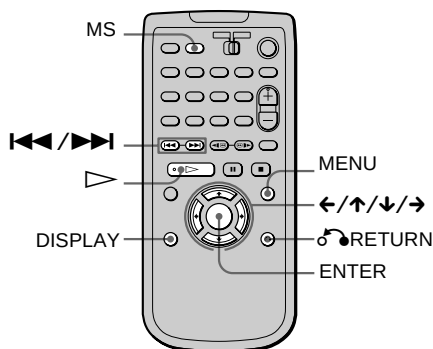
Note

Only the letters in alphabet and numbers in the album/track names can be displayed. Other characters appear as an “*” (asterisk).

Viewing a JPEG Image File

DATA-CD

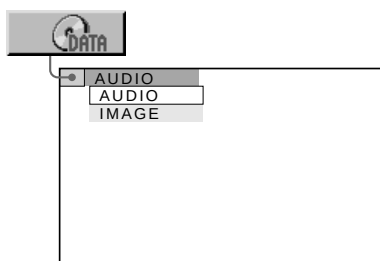
JPEG image files recorded on DATA-CDs (CD-ROM, CD-R, CD-RW) can be viewed on this player. Note, however, that you can view only the JPEG image files which conform to the DCF image file format.



1 Insert a DATA-CD into the disc slot.

(If the MS indicator on the player is lit, press MS to turn it off in stop mode.)

The Control Menu appears if an MP3 audio tracks or JPEG image file is recorded on the DATA-CD.



2 Press $\uparrow/\downarrow$ to select “IMAGE.”

3 Press $\triangleright$ or ENTER.

The first JPEG image file recorded on the DATA-CD is played back.

To play the next or previous file

Press $\triangleright$ or $\triangleleft$.

You can also use $\triangleright$ or $\triangleleft$ on the player to select "IMAGE" in Step 2.

If you want to play MP3 audio tracks after viewing JPEG image files, press DISPLAY to display the Control Menu. Select using $\uparrow/\downarrow$, then press ENTER. Follow from Step 2 of "Playing an MP3 Audio Track" on page 67.

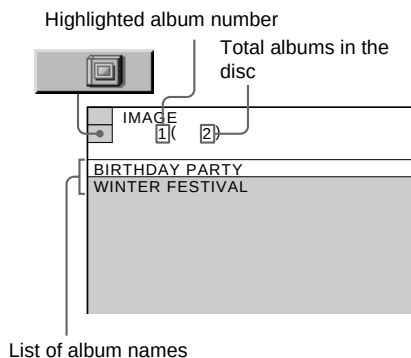
Notes

- JPEG image files which are set to display larger than 4720 dots vertically or horizontally may not be displayed.
- JPEG image files which do not fit the screen will be reduced so they can be displayed properly.

Selecting an album and file

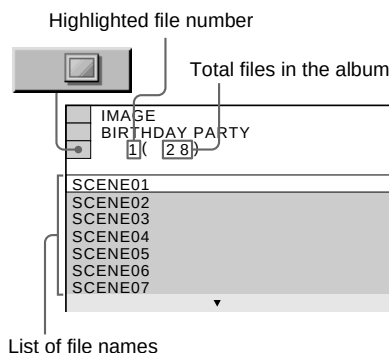
1 After Step 3 in "Viewing a JPEG Image File," press MENU.

The albums recorded on the DATA-CD appear. When an album is being played, its title is shaded.



2 Press $\uparrow/\downarrow$ to select the album you want to play, then press ENTER.

Files in the album appear. When a file is being played, its title is shaded.



3 Press $\uparrow/\downarrow$ to select the file, then press ENTER.

The player starts playing the selected file.

To go to the next or previous page

Press $\rightarrow$ or $\leftarrow$.

To return to the previous display

Press $\hookrightarrow$ RETURN.

To turn off the display

Press MENU.

By pressing MENU, you can display the album list when the player is stopped.

Note

Only the letters in alphabet and numbers in the album/file names can be displayed. Other characters appear as an "*" (asterisk).

continued $\rightarrow$

Rotating a JPEG image

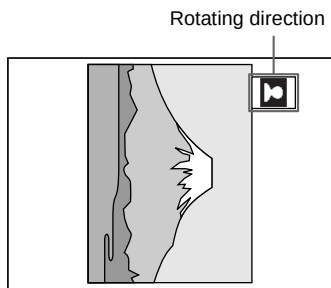
You can rotate an image by 90 degrees.

Press ←/→ while viewing an image.

Each time you press →, the image rotates clockwise by 90 degrees.

Each time you press ←, the image rotates counterclockwise by 90 degrees.

Example of when you press → once:



About the “Memory Stick”

“Memory Stick” is a compact, portable and versatile Integrated Circuit recording medium with a data capacity that exceeds a floppy disk. “Memory Stick” is specially designed for exchanging and sharing digital data among “Memory Stick” compatible products. Because it is removable, the “Memory Stick” can also be used for external data storage.

Types of “Memory Stick”

- There are two types of “Memory Stick;”
- “MagicGate (MG) Memory Stick”* that is equipped with “MagicGate” copyright protection technology.
 - “Memory Stick”** that is not equipped with “MagicGate” copyright protection technology.

You can use both types of “Memory Stick” with this player.

Type of “Memory Stick”	Recordable data
 “MG Memory Stick”	Audio data + Still image + General data
 “Memory Stick”	Still image + General data

What is “MagicGate***”?

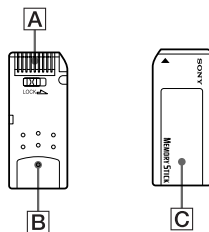
“MagicGate” is a copyright protection technology**** for the “MG Memory Stick” and compliant products. Authentication ensures that protected content is transferred only between compliant devices and a “MG Memory Stick,” and that protected content is recorded and transferred in an encrypted format to prevent unauthorized copying or playback.

Note on use

To avoid damaging data, do not

- remove the “Memory Stick” or disconnect the power cord while playing it.
- use the “Memory Stick” in a location subject to static electricity or electric noise.

On handling the “Memory Stick”



- The tactile protrusion on the rear surface of a “MG Memory Stick” distinguishes it from an ordinary “Memory Stick.” ([B])
- To prolong the life of the “Memory Stick,” use the storage case supplied with the “Memory Stick.”
- Do not touch the “Memory Stick” connector with your finger or metallic objects. ([A])
- Do not bend, drop or apply strong shock to the “Memory Stick.”
- Do not disassemble or modify the “Memory Stick.”
- Do not allow the “Memory Stick” to get wet.
- Do not use or store the “Memory Stick” in a location that is subject to:
 - Extremely high temperature such as in a car parked in the sun
 - Direct sunlight
 - High humidity or places with corrosive substances
- Do not attach any other material than the label supplied with the “Memory Stick” on the label space. ([C])
- Attach the label so that it does not stick out from the proper attachment location.
- Do not stick one label on top of another.
- If the label is turned up at the corners or loose, replace it with a new one.

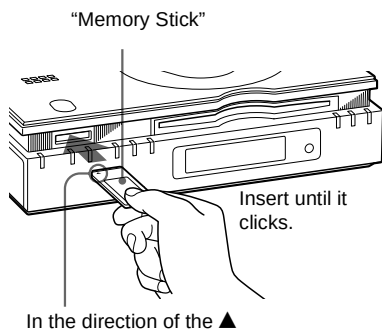
Note

Attach the label correctly on the “Memory Stick” or you may not be able to remove the “Memory Stick” from the player.

- * “MagicGate Memory Stick,” and  are trademarks of Sony Corporation.
- ** “Memory Stick” and  are trademarks of Sony Corporation.
- *** “MagicGate” and **MAGICGATE** are trademarks of Sony Corporation.
- **** The copyright protection technology of this player conforms to the SDMI (Secure Digital Music Initiative) standard.

Inserting a “Memory Stick”

Insert the “Memory Stick” securely into the MEMORY STICK slot.



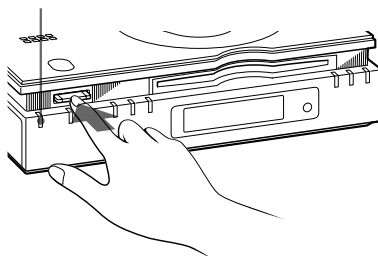
Notes

- Observe the side and direction carefully when inserting a “Memory Stick.” Insert the “Memory Stick” with the ▲ mark facing up, and in the direction of the ▲. Otherwise, the slot may be damaged.
- Do not insert any objects other than a “Memory Stick” into the slot. Doing so may cause a malfunction.

To take out the “Memory Stick”

While the player is stopped, push and release the “Memory Stick.”

MS indicator



Note

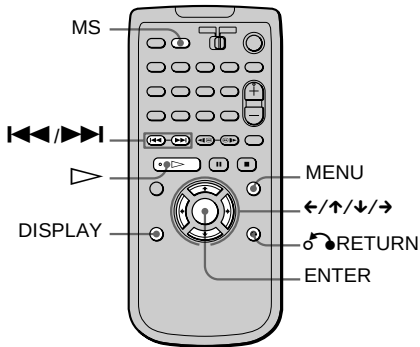
When you take out the “Memory Stick,” make sure that the MS indicator is not lit in yellow. If you turn off the power or disconnect the power cord while the MS indicator is lit in yellow, the “Memory Stick” may be damaged.

Playing an ATRAC3 Audio Track

MGMS

You can play ATRAC3 audio tracks recorded on an “MG Memory Stick.”

Make sure the MS indicator is lit (MS mode) when you play an “MG Memory Stick.”

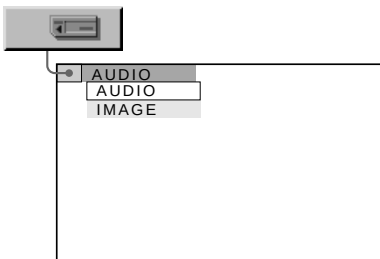


1 Insert a “MG Memory Stick” into the **MEMORY STICK** slot (page 72).

2 Press **MS**.

The MS indicator on the player lights up (MS mode).

The Control Menu is displayed.



3 Press **↑/↓** to select “AUDIO.”

4 Press **▷** or **ENTER**.

The first track recorded on the “MG Memory Stick” is played back.

To play the next or previous track

Press **▶▶** or **◀◀**.

You can view the disc information (page 52) or scan (page 49) while playing ATRAC3 audio tracks. You can also activate Repeat Play (page 46), “AUDIO” (page 57), and “TVS” (page 59).

You can also use **▶▶** or **◀◀** on the player to select “AUDIO” in Step 3.

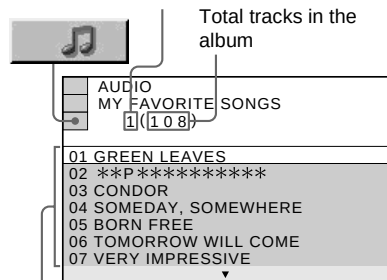
If you want to view JPEG image files after playing ATRAC3 audio tracks, press **DISPLAY** to display the Control Menu. Select using **↑/↓**, then press **ENTER**. Follow from Step 3 of “Viewing a JPEG Image File” on page 75.

Selecting a track

1 After Step 4 in “Playing an ATRAC3 Audio Track,” press **MENU**.

The audio tracks recorded on the “MG Memory Stick” appear. When a track is being played, its title is shaded.

Highlighted track number



List of track names

2 Press **↑/↓** to select the track, then press **ENTER**.

The player starts playing the selected track.

Playing a “Memory Stick”

continued →

To go to the next or previous page

Press → or ←.

To return to the previous display

Press ⏮ RETURN.

To turn off the display

Press MENU.

To switch to disc mode

Press MS. The MS indicator goes out.

💡 By pressing MENU, you can display the track list when the player is stopped.

Notes

- Only the letters in alphabet and numbers in the album/track names can be displayed. Other characters appear as an “*” (asterisk).
- MS mode will be released when:
 - the player enters standby mode
 - the power cord is disconnected

Playing a track with a playback period restriction (DATE/TIME SETUP)

Set the current date and time so that you can play an audio track with a playback period restriction recorded on an “MG Memory Stick.”

1 Press DISPLAY when the player is in stop mode.

The Control Menu appears.

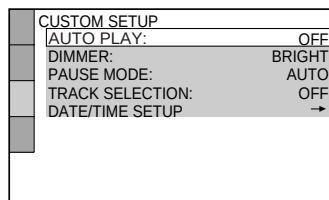
2 Press ↑/↓ to select  (SETUP), then press ENTER.

3 Press ↑/↓ to select “CUSTOM,” then press ENTER.

The Setup Display appears.

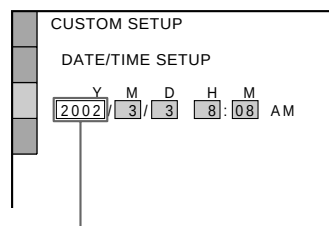
4 Press ↑/↓ to select “CUSTOM SETUP,” then press ENTER.

The “CUSTOM SETUP” display appears.



5 Press ↑/↓ to select “DATE/TIME SETUP →,” then press ENTER.

The “DATE/TIME SETUP” display appears.



Start with the year.

6 Press ↑/↓ to select a figure, then press →.

The “Y (year)” is set, and the next item “M (month)” will be highlighted.

7 Repeat Step 6 to set “M (month),” “D (day),” “H (hour),” and “M (minute),” then press ENTER.

When you press ENTER after setting “M (minute),” the clock starts operating.

If you make a mistake

Press ← repeatedly until the item you want to correct is highlighted, then input the correct number.

To turn off the Setup Display

Press DISPLAY repeatedly until the Setup Display is turned off.

Note

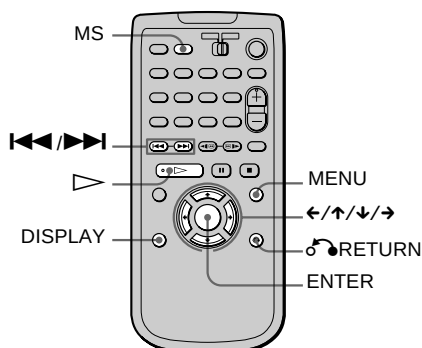
When you disconnect the power cord, the date/time setting will return to the factory settings.

Viewing a JPEG Image File

MS MGMS

You can view JPEG image files recorded on an “MG Memory Stick” or a “Memory Stick.” Note, however, that the player can display JPEG image files recorded using a digital camera only if the image file format and the directory structure are DCF compliant.

Make sure the MS indicator is lit (MS mode) when you play an “MG Memory Stick” or “Memory Stick.”



- 1** Insert a “Memory Stick” into the MEMORY STICK slot (page 72).

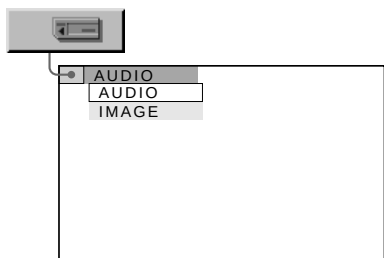
Playing a “Memory Stick”

continued →

2 Press MS.

The MS indicator on the player lights up (MS mode).

The Control Menu is displayed.



3 Press ↑/↓ to select “IMAGE.”

4 Press ▷ or ENTER.

The first image recorded on the “Memory Stick” is played back.

To play the next or previous file

Press ►► or ◀◀.

💡 You can also use ►► or ◀◀ on the player to select “IMAGE” in Step 3.

💡 If you want to play ATRAC3 audio tracks after viewing JPEG image files, press DISPLAY to display the Control Menu. Select ◻ using ↑/↓, then press ENTER. Follow from Step 3 of “Playing an ATRAC3 Audio Track” on page 73.

Notes

- JPEG image files which have been edited or renamed on computers may not be displayed.
- JPEG image files which are set to display larger than 4720 dots vertically or horizontally may not be displayed.
- JPEG image files which do not fit the screen will be reduced so they can be displayed properly.

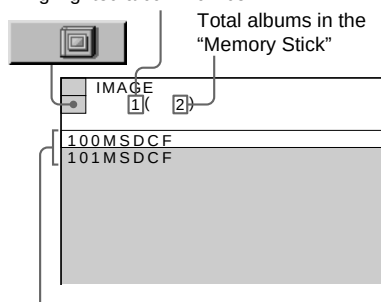
Selecting an album and file

1 After Step 4 in “Viewing a JPEG Image File,” press MENU.

A list of the albums saved on the “Memory Stick” appears. When an album is being played, its title is shaded.

Highlighted album number

Total albums in the “Memory Stick”



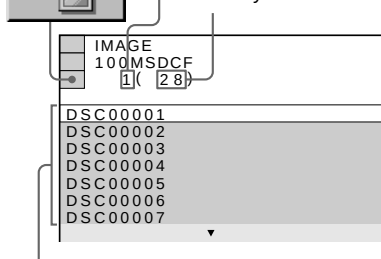
List of album names

2 Press ↑/↓ to select an album, then press ENTER.

The files in the album appear. When a file is being played, its title is shaded.

Highlighted file number

Total files in the “Memory Stick”



List of file names

3 Press ↑/↓ to select the file, then press ENTER.

The player starts playing the selected file.

To go to the next or previous page

Press → or ←.

To return to the previous display

Press ⏮ RETURN.

To turn off the display

Press MENU.

To switch to disc mode

Press MS. The MS indicator goes out.

💡 By pressing MENU, you can display the album list when the player is stopped.

Notes

- Only the letters in alphabet and numbers in the album/file names can be displayed. Other characters appear as an "*" (asterisk).
- MS mode will be released when:
 - the player enters standby mode
 - the power cord is disconnected

Rotating a JPEG image

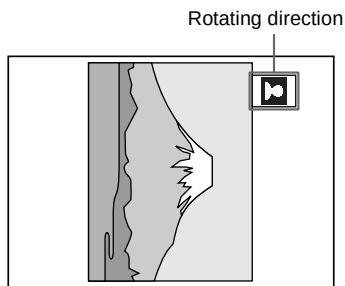
You can rotate an image by 90 degrees.

Press ←/→ while viewing an image.

Each time you press →, the image rotates clockwise by 90 degrees.

Each time you press ←, the image rotates counterclockwise by 90 degrees.

Example of when you press → once:



Using Various Additional Functions

Locking Discs (Custom Parental Control, Parental Control)

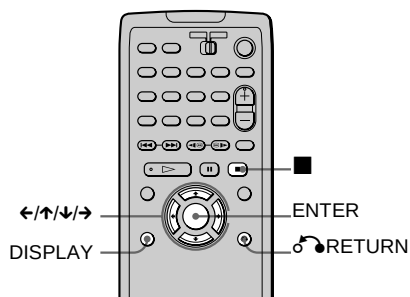
You can set two kinds of playback restrictions for the desired disc.

- Custom Parental Control
You can set the playback restrictions so that the player will not play inappropriate discs.
- Parental Control
Playback of some DVD VIDEOS can be limited according to a predetermined level such as the age of the users.
The same password is used for both Parental Control and Custom Parental Control.

Custom Parental Control

DVD VIDEO VIDEO CD CD

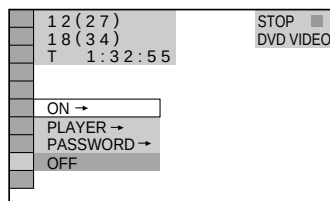
You can set the same Custom Parental Control password for up to 50 discs. When you set the fifty-first disc, the first disc is canceled.



- 1 Insert the disc you want to lock.**
If the disc is playing, press ■ to stop playback.
- 2 Press DISPLAY while the player is in stop mode.**
The Control Menu is displayed.

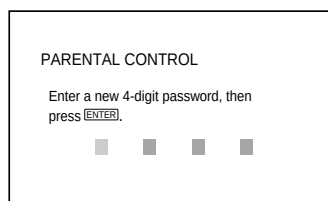
- 3 Press ↑/↓ to select (PARENTAL CONTROL), then press ENTER.**

The options for “PARENTAL CONTROL” appear.



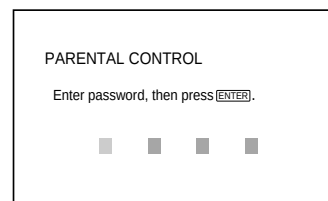
- 4 Press ↑/↓ to select “ON →,” then press ENTER.**

■ **If you have not entered a password**
The display for registering a new password appears.



Enter a 4-digit password by pressing ↑/↓ to select the digit, followed by → to move the cursor. Then press ENTER. The display for confirming the password appears.

■ **When you have already registered a password**
The display for entering the password appears.



- 5 Enter or re-enter your 4-digit password by pressing $\uparrow/\downarrow$ to select the digit, followed by $\rightarrow$ to move the cursor. Then press ENTER.

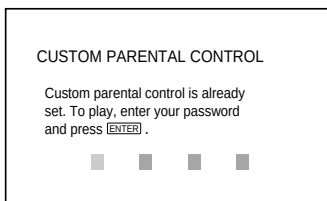
“Custom parental control is set.” appears and then the screen returns to the Control Menu display.

To turn off the Custom Parental Control function

- 1 Follow Steps 1 through 3 of “Custom Parental Control.”
- 2 Press $\uparrow/\downarrow$ to select “OFF $\rightarrow$,” then press ENTER.
- 3 Enter your 4-digit password using $\uparrow/\downarrow$ to select the digit, followed by $\rightarrow$ to move the cursor. Then press ENTER.

To play the disc for which Custom Parental Control is set

- 1 Insert the disc for which Custom Parental Control is set.
The “CUSTOM PARENTAL CONTROL” display appears.



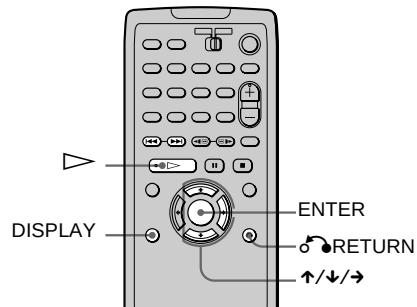
- 2 Enter your 4-digit password using $\uparrow/\downarrow$ to select the digit, followed by $\rightarrow$ to move the cursor. Then press ENTER.
The player is ready for playback.

If you forget your password, enter the 6-digit number “199703” when the “CUSTOM PARENTAL CONTROL” display asks you for your password, then press ENTER. (Press $\rightarrow$ after the 4th digit to allow the entire 6-digit number to be entered.) The display will ask you to enter a new 4-digit password.

Parental Control (limiting playback by children)

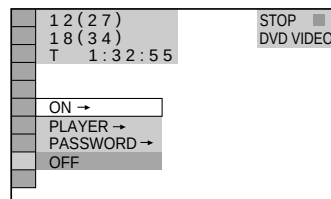
DVD VIDEO

Playback of some DVD VIDEOS can be limited according to a predetermined level such as the age of the users. The “PARENTAL CONTROL” function allows you to set a playback limitation level. A scene that is limited is not played, or it is replaced by a different scene.



- 1 Press DISPLAY while the player is in stop mode.
The Control Menu appears.

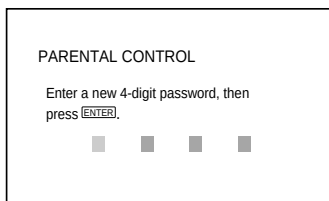
- 2 Press $\uparrow/\downarrow$ to select (PARENTAL CONTROL), then press ENTER.
The options for “PARENTAL CONTROL” appear.



3 Press **↑/↓** to select **“PLAYER →,”** then press **ENTER**.

■ **If you have not entered a password**

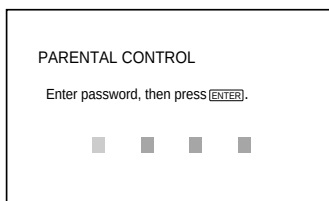
The display for registering a new password appears.



Enter a 4-digit password by pressing **↑/↓** to select the digit, followed by **→** to move the cursor. Then press **ENTER**. The display for confirming the password appears.

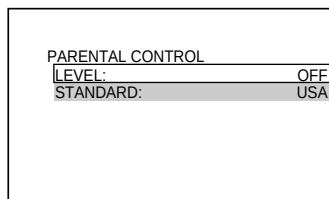
■ **When you have already registered a password**

The display for entering the password appears.



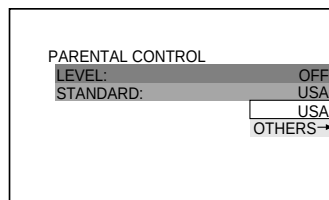
4 Enter or re-enter your 4-digit password by pressing **↑/↓** to select the digit, followed by **→** to move the cursor. Then press **ENTER**.

The display for setting the playback limitation level appears.



5 Press **↑/↓** to select **“STANDARD,”** then press **ENTER**.

The selection items for **“STANDARD”** are displayed.



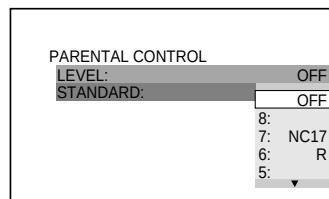
6 Press **↑/↓** to select a geographic area as the playback limitation level, then press **ENTER**.

The area is selected.

When you select **“OTHERS →,”** select and enter the standard code in the table on page 81 using **↑/↓**.

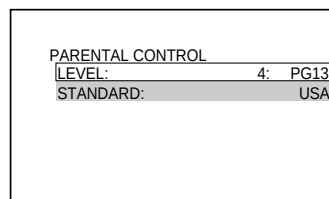
7 Press **↑/↓** to select **“LEVEL,”** then press **ENTER**.

The selection items for **“LEVEL”** are displayed.



8 Select the level you want using **↑/↓**, then press **ENTER**.

Parental Control setting is complete.



The lower the value, the more strict the limitation.

To turn off the Parental Control function

Set “LEVEL” to “OFF” in Step 8.

To play a disc for which Parental Control is set

- 1 Insert the disc and press ▷. The “PARENTAL CONTROL” display appears.
- 2 Enter your 4-digit password using ↑/↓ to select the digit, followed by → to move the cursor. Then press ENTER. The player starts playback.

💡 If you forget your password, remove the disc and repeat Steps 1 to 3 of “Parental Control (limiting playback by children).” When you are asked to enter your password, enter “199703,” then press ENTER. (Press → after the 4th digit to allow the entire 6 digit number to be entered.) The display will ask you to enter a new 4-digit password. After you enter a new 4-digit password, replace the disc in the player and press ▷. When the “PARENTAL CONTROL” display appears, enter your new password.

Notes

- When you play DVD VIDEOS which do not have the Parental Control function, playback cannot be limited on this player.
- Depending on the DVD VIDEO, you may be asked to change the parental control level while playing the disc. In this case, enter your password, then change the level. If the Resume Play mode is canceled, the level returns to the original level.

Area Code

Standard	Code number	Standard	Code number
Argentina	2044	Korea	2304
Australia	2047	Malaysia	2363
Austria	2046	Mexico	2362
Belgium	2057	Netherlands	2376
Brazil	2070	New Zealand	2390
Canada	2079	Norway	2379
Chile	2090	Pakistan	2427
China	2092	Philippines	2424
Denmark	2115	Portugal	2436
Finland	2165	Russia	2489
France	2174	Singapore	2501
Germany	2109	Spain	2149
India	2248	Sweden	2499
Indonesia	2238	Switzerland	2086
Italy	2254	Thailand	2528
Japan	2276	United Kingdom	2184

Changing the password

- 1 Press DISPLAY while the player is in stop mode. The Control Menu appears.
- 2 Press ↑/↓ to select  (PARENTAL CONTROL), then press ENTER. The options for “PARENTAL CONTROL” appear.
- 3 Press ↑/↓ to select “PASSWORD →,” then press ENTER. The display for entering the password appears.

4 Enter your 4-digit password using $\uparrow/\downarrow$ to select the digit, followed by $\rightarrow$ to move the cursor. Then press ENTER.

5 Enter a new 4-digit password using $\uparrow/\downarrow$ to select the digit, followed by $\rightarrow$ to move the cursor. Then press ENTER.

6 To confirm your password, re-enter it using $\uparrow/\downarrow$ to select the digit, followed by $\rightarrow$ to move the cursor. Then press ENTER.

If you make a mistake entering your password

Press $\leftarrow$ before you press ENTER and input the correct number.

If you make a mistake

Press $\hookrightarrow$ RETURN.

To turn off the Control Menu

Press DISPLAY repeatedly until the Control Menu is turned off.

Operation Sound Effects

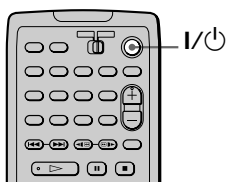
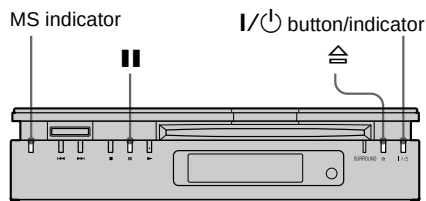
(Sound Feedback)

The player beeps when the following operations are performed.

The default setting of the Sound Feedback function is set to off.

Operation	Operation sound
Power is turned on	One beep
Power is turned off	Two beeps
$\triangleright$ is pressed	One beep
II is pressed	Two beeps
Playback is stopped	One long beep
Operation is not possible	Three beeps

To set Sound Feedback



1 Press I/⏻ on the player or the remote.

The I/⏻ indicator lights up in green. Make sure that the MS indicator is turned off. If there is a disc in the player, press  and remove the disc.

2 Press and hold on the player for more than two seconds.

You will hear one beep and the Sound Feedback function is turned on.

To turn off the Sound Feedback function

When there is no disc in the player and the MS indicator is turned off, press and hold  on the player for more than two seconds. You will hear two beeps and the Sound Feedback function is turned off.

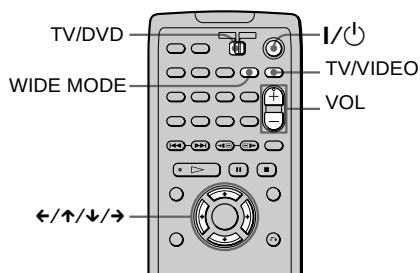
Controlling Your TV, etc. with the Supplied Remote

By adjusting the remote signal, you can control your TV or Sony Active Speaker System SA-F21 (not supplied) with the supplied remote.

Notes

- Depending on the units being connected, you may not be able to control your TV or Sony AV amplifier (receiver) using some of the buttons below.
- If you enter a new TV code, the code previously entered will be erased.
- When you replace the batteries of the remote, the TV code may be reset to the default setting. Reset the appropriate code.

Controlling TVs with the remote



1 Slide the TV/DVD switch to "TV."

2 Hold down I/⏻, and enter your TV's manufacturer's code (see the table) using .

3 Release I/⏻.

Manufacturer's codes of controllable TVs

Manufacturer	Press ←/↑/↓/→ to input code
Sony (default)	↑↑
Fisher	↑↓
General Electric	↑←
JVC	↓↑
Magnavox	↑→
Panasonic	→→
Philips	↑→
Quasar	→↓
RCA	↑←
Samsung	↓→
Sanyo	↑↓
Sears	→← or ↑← or ↑↓
Sharp	→↓
Teknika	↑→
Toshiba	→←
Zenith	→↑

Controlling the TV

When you set the TV/DVD switch to “TV,” you can control your TV using the buttons below.

By pressing	You can
I/⏻	Turn the TV on or off
VOL (volume) +/-	Adjust the volume of the TV
TV/VIDEO	Switch the TV's input source between the TV and other input sources
WIDE MODE	Switch to or from the wide mode of a Sony wide TV

Controlling Active Speaker System SA-F21

When you set the TV/DVD switch to “DVD,” you can adjust the volume using VOL +/-.

💡 There are some Sony audio products you can adjust the volume with the supplied remote.

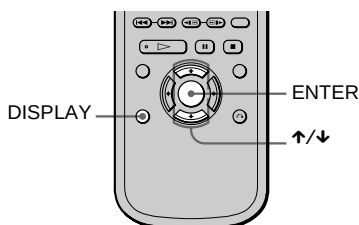
Using the Setup Display

By using the Setup Display, you can make various adjustments to items such as picture and sound. You can also set a language for the subtitles and the Setup Display, among other things. For details on each Setup Display item see page 86 through 92. For an overall list of Setup Display items, see page 102.

Note

Playback settings stored in the disc take priority over the Setup Display settings and not all the functions described may work.

How to use the Setup Display

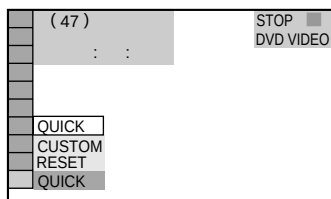


- 1 Press **DISPLAY** on the remote when the player is in stop mode.

The Control Menu appears.

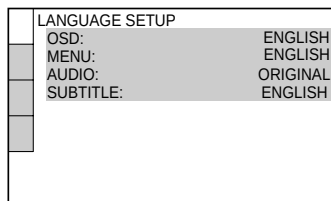
- 2 Press **↑/↓** to select  (**SETUP**), then press **ENTER**.

The options for “SETUP” appear.



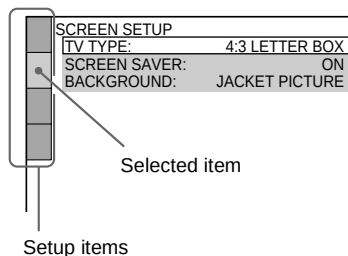
- 3 Press **↑/↓** to select “CUSTOM,” then press **ENTER**.

The Setup Display appears.



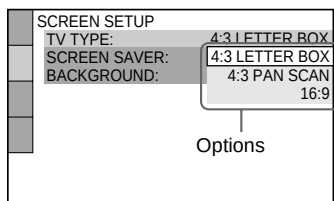
- 4 Press **↑/↓** to select the setup item from the displayed list: “LANGUAGE SETUP,” “SCREEN SETUP,” “CUSTOM SETUP,” or “AUDIO SETUP.” Then press **ENTER**.

The selected setup item appears.
Example: “SCREEN SETUP”



- 5 Select an item using **↑/↓**, then press **ENTER**.

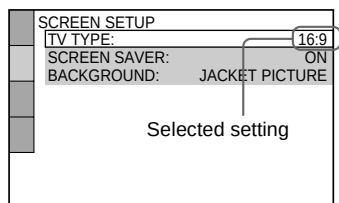
The options for the selected item appear.
Example: “TV TYPE”



6 Select a setting using ↑/↓, then press ENTER.

The setting is selected and setup is complete.

Example: “16:9”



To turn off the Setup Display

Press DISPLAY repeatedly until the Setup Display is turned off.

💡 If you select “QUICK” in Step 3, you will enter the Quick Setup mode (page 34).

Follow from Step 5 of the Quick Setup explanation to make basic adjustments.

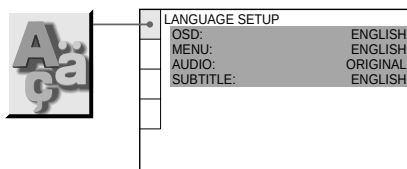
💡 If you select “RESET” in Step 3, you can reset all of the “SETUP” settings on pages 102 to 103 to the default settings (except for “DATE/TIME SETUP”). After you select “RESET” and press ENTER, select “YES” and press ENTER to reset the settings (it takes a few seconds to complete), or select “NO” and press ENTER to return to the Control Menu. Do not turn off the player during resetting.

Setting the Display or Sound Track Language

(LANGUAGE SETUP)

“LANGUAGE SETUP” allows you to set various languages for the on-screen display or sound track.

Select “LANGUAGE SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 85).



■ OSD (On-Screen Display)

Switches the display language on the screen.
Selects the language from the displayed list.

■ MENU (DVD VIDEO only)

You can select the desired language for the menu. Selects the language from the displayed list.

■ AUDIO (DVD VIDEO only)

Switches the language of the sound track.
Selects the language from the displayed list.
When you select “ORIGINAL,” the language given priority in the disc is selected.

■ SUBTITLE (DVD VIDEO only)

Switches the language of the subtitles recorded on the DVD VIDEO.
Select the language from the displayed list.
When you select “AUDIO FOLLOW,” the language for the subtitles changes according to the language you selected for the sound track.

💡 If you select “OTHERS →” in “MENU,” “SUBTITLE,” and “AUDIO,” select and enter the language code from the list using **↑/↓** to select the digit, followed by **→** to move the cursor (page 101). After you have made a selection, the language code (4 digits) is displayed the next time you select “OTHERS →.”

Note

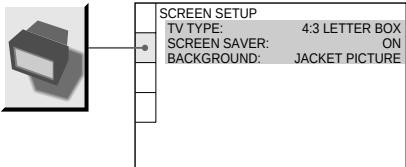
When you select a language that is not recorded on the disc, one of the recorded languages will be automatically selected (except for the “OSD”).

Settings for the Display

(SCREEN SETUP)

Choose settings according to the TV to be connected.

Select “SCREEN SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 85). The default settings are underlined.



■TV TYPE

Selects the aspect ratio of the connected TV (4:3 standard or wide).

4:3 <u>LETTER</u> <u>BOX</u>	Select this when you connect a 4:3 screen TV. Displays a wide picture with bands on the upper and lower portions of the screen.
4:3 PAN SCAN	Select this when you connect a 4:3 screen TV. Automatically displays the wide picture on the entire screen and cuts off the portions that do not fit.
16:9	Select this when you connect a wide-screen TV or a TV with a wide mode function.

4:3 LETTER BOX



4:3 PAN SCAN



16:9



Note

Depending on the DVD, “4:3 LETTER BOX” may be selected automatically instead of “4:3 PAN SCAN” or vice versa.

■SCREEN SAVER

Turns on and off the screen saver so that the screen saver image appears when you leave the player in pause or stop mode for 15 minutes, or when you play back an audio or JPEG image on a CD/DATA-CD/ “Memory Stick” for more than 15 minutes. The screen saver will help prevent your display device from becoming damaged (ghosting). Press $\triangleright$ to turn off the screen saver.

ON	Turns on the screen saver.
OFF	Turns off the screen saver.

■BACKGROUND

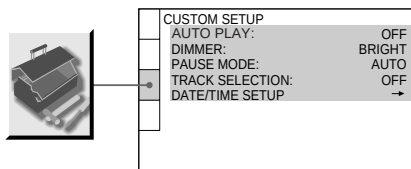
Selects the background color or picture on the TV screen in stop mode or while playing a CD/DATA-CD (MP3 audio track)/“MG Memory Stick” (ATRAC3 audio track).

JACKET PICTURE	The jacket picture (still picture) appears in the background, but only when the jacket picture is already recorded on the disc (CD-EXTRA, etc.). If the disc does not contain a jacket picture, the “GRAPHICS” picture appears.
GRAPHICS	A preset picture stored in the player appears in the background.
BLUE	The background color is blue.
BLACK	The background color is black.

Custom Settings (CUSTOM SETUP)

Use this to set up playback related and other settings.

Select “CUSTOM SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 85). The default settings are underlined.



■AUTO PLAY

Selects the Auto Play setting when you turn on the player.

<u>OFF</u>	Does not use “TIMER,” “DEMO1,” or “DEMO2” to start playback.
TIMER	Starts playing when the player is turned on. A CD, DVD VIDEO or VIDEO CD can be played at any time when the player is connected to a timer (not supplied).
DEMO1	Starts playing the first demonstration automatically.
DEMO2	Starts playing the second demonstration automatically.

■DIMMER

Adjusts the lighting of the front panel display.

<u>BRIGHT</u>	Makes the front panel display bright.
DARK	Makes the front panel display dark.
OFF	Turns off the lighting of the front panel display.
AUTO	Turn on the front panel display for a few seconds when a button on the player or remote is pressed.

■PAUSE MODE (DVD VIDEO/DVD-RW only)

Selects the picture in pause mode.

<u>AUTO</u>	The picture, including subjects that move dynamically, is output with no jitter. Normally, select this position.
FRAME	The picture, including subjects that do not move dynamically, is output in high resolution.

■TRACK SELECTION (DVD VIDEO only)

Gives the sound track which contains the highest number of channels priority when you play a DVD VIDEO on which multiple audio formats (PCM, DTS or Dolby Digital format) are recorded.

<u>OFF</u>	No priority given.
AUTO	Priority given.

Notes

- When you set the item to “AUTO,” the language may change. The “TRACK SELECTION” setting has higher priority than the “AUDIO” settings in “LANGUAGE SETUP” (page 86).
- If you set “DTS” to “OFF” (page 92), the DTS sound track is not played even if you set “TRACK SELECTION” to “AUTO.”
- If PCM, DTS and Dolby Digital sound tracks have the same number of channels, the player selects PCM, DTS and Dolby Digital sound tracks in this order.
- Depending on the DVD VIDEO, the audio channel with priority may be predetermined. In this case, you cannot give priority to the DTS or Dolby Digital format by selecting “AUTO.”

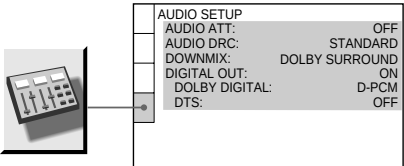
■DATE/TIME SETUP →

Set the current date and time. See “Playing a track with a playback period restriction (DATE/TIME SETUP)” in “Playing an ATRAC3 Audio Track” on page 74.

Settings for the Sound
(AUDIO SETUP)

“AUDIO SETUP” allows you to set the sound according to the playback and connection conditions.

Select “AUDIO SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 85). The default settings are underlined.



■AUDIO ATT (attenuation)

If the playback sound is distorted, set this item to “ON.” The player reduces the audio output level.

This function affects the output of the following jacks:

–AUDIO OUT L/R jacks

<u>OFF</u>	Turns off the audio attenuation. Normally, select this position.
ON	Reduces the audio output level so that no sound distortion occurs. Select this when the playback sound from the speakers is distorted.

■AUDIO DRC (Dynamic Range Control) (DVD VIDEO/DVD-RW only)

Makes the sound clear when the volume is turned down when playing a DVD that has the “AUDIO DRC” function. This affects the output from the following jacks:

- AUDIO OUT L/R jacks
- DIGITAL OUT (OPTICAL) jack only when “DOLBY DIGITAL” is set to “D-PCM” in “DIGITAL OUT” (page 92).

<u>STANDARD</u>	Normally, select this position.
TV MODE	Makes the low sounds clear even if you turn the volume down. It is especially recommended when you listen to the sound using the speakers of the TV.
WIDE RANGE	Gives you the feeling of being at a live performance. When you use high quality speakers, it is even more effective.

■DOWNMIX (DVD VIDEO/DVD-RW only)

Switches the mixing down methods when you play a DVD on which rear signal components such as “Rear (left),” “Rear (right),” or “Rear (monaural)” are recorded in Dolby Digital format. For details on the rear signal components, see “Displaying the audio information of the disc” (page 58). This function affects the output of the following jacks:

- AUDIO OUT L/R jacks
- DIGITAL OUT (OPTICAL) jack when “DOLBY DIGITAL” is set to “D-PCM” in “DIGITAL OUT” (page 92).

<u>DOLBY SURROUND</u>	Select this when the player is connected to an audio component that conforms to Dolby Surround (Pro Logic). The output signals which reproduce the Dolby Surround effect are downmixed to 2 channels.
-----------------------	---

NORMAL	Select this when the player is connected to an audio component that does not conform to Dolby Surround (Pro Logic). All of the output signals are downmixed to 2 channels without the Dolby Surround (Pro Logic) effect.
--------	--

■DIGITAL OUT

Selects if audio signals are output via the DIGITAL OUT (OPTICAL) jack.

<u>ON</u>	Normally, select this position. When you select “ON,” set “DOLBY DIGITAL” and “DTS.” For details on setting these items, see “Setting the digital output signal.”
OFF	The player does not output the audio signals via the DIGITAL OUT (OPTICAL) jack. The influence of the digital circuit upon the analog circuit is minimal.

Note

MP3 audio and ATRAC3 audio tracks will not be output from the DIGITAL OUT (OPTICAL) jack.

Setting the digital output signal

Switches the method of outputting audio signals when you connect the following component using an optical digital cord via the DIGITAL OUT (OPTICAL) jack.

- Amplifier (receiver) with digital input jack
- AV amplifier (receiver) with a built-in DTS or DOLBY DIGITAL decoder
- MD or DAT deck

For connection details, see page 26. Select “DOLBY DIGITAL” and “DTS” after setting “DIGITAL OUT” to “ON.”

AUDIO SETUP	
AUDIO ATT:	OFF
AUDIO DRC:	STANDARD
DOWNMIX:	DOLBY SURROUND
DIGITAL OUT:	ON
DOLBY DIGITAL:	D-PCM
DTS:	OFF

continued →

■DOLBY DIGITAL (DVD VIDEO/DVD-RW only)

Selects the Dolby Digital signals output via the DIGITAL OUT (OPTICAL) jack.

<u>D-PCM</u>	Select this when the player is connected to an audio component lacking a built-in Dolby Digital decoder. You can select whether the signals conform to Dolby Surround (Pro Logic) or not by making adjustments to the “DOWNMIX” item in “AUDIO SETUP” (page 91).
DOLBY DIGITAL	Select this when the player is connected to an audio component with a built-in Dolby Digital decoder. If the player is connected to an audio component lacking a built-in Dolby Digital decoder, do not set this. Otherwise, when you play the Dolby Digital sound track, a loud noise (or no sound) will come out from the speakers, affecting your ears or causing the speakers to be damaged.

■DTS (DVD VIDEO only)

Selects if DTS signals are output via the DIGITAL OUT (OPTICAL) jack.

<u>OFF</u>	Select this when the player is connected to an audio component lacking a built-in DTS decoder. Note that the DTS stereo signals are output in this setting.
ON	Select this when the player is connected to an audio component having a built-in DTS decoder. If the player is connected to an audio component lacking a built-in DTS decoder, do not set this. Otherwise, when you play the DTS sound track, a loud noise (or no sound) will come out from the speakers, affecting your ears or causing the speakers to be damaged.

Note

If you select one of the TVS settings while playing a DVD, the player does not output the Dolby Digital signals from the DIGITAL OUT (OPTICAL) jack (when you set “DOLBY DIGITAL” in “AUDIO SETUP” to “D-PCM”).

Troubleshooting

If you experience any of the following difficulties while using the player, use this troubleshooting guide to help remedy the problem before requesting repairs. Should any problem persist, consult your nearest Sony dealer.

Power

The power is not turned on.

- ➔ Check that the AC power adaptor and AC power cord are connected securely.

Picture

There is no picture.

- ➔ The connecting cords are not connected securely.
- ➔ The connecting cords are damaged.
- ➔ The player is not connected to the correct TV input jack (page 22).
- ➔ The video input on the TV is not set so that you can view pictures on the player.

Picture noise appears.

- ➔ The disc is dirty or flawed.
- ➔ If the picture output from your player goes through your VCR to get to your TV, the copy-protection signal applied to some DVD programs could affect picture quality. If you still experience problems even when you connect your player directly to your TV, please try connecting your player to your TV's S video input (page 22).

Even though you set the aspect ratio in "TV TYPE" or "SCREEN SETUP," the picture does not fill the screen.

- ➔ The aspect ratio of the disc is fixed on your DVD.

Sound

There is no sound.

- ➔ The connecting cord is not connected securely.
- ➔ The connecting cord is damaged.
- ➔ The player is connected to the wrong input jack on the amplifier (receiver) (page 26, 28, 30).
- ➔ The amplifier (receiver) input is not changed so that you can listen to the player.
- ➔ The player is in pause mode or in Slow-motion Play mode.
- ➔ The player is in fast forward or fast reverse mode.
- ➔ If the audio signal does not come through the DIGITAL OUT (OPTICAL) jack, check the audio settings (page 90).
- ➔ MP3 audio and ATRAC3 audio tracks will not be output from the DIGITAL OUT (OPTICAL) jack.

Sound is noisy.

- ➔ The disc is dirty or flawed.
- ➔ When playing a CD with DTS sound tracks, noise will come from the AUDIO OUT L/R jacks (page 38).

Sound distortion occurs.

- ➔ Set "AUDIO ATT" in "AUDIO SETUP" to "ON" (page 90).

Operation

The remote does not function.

- ➔ There are obstacles between the remote and the player.
- ➔ The distance between the remote and the player is too far.
- ➔ The remote is not pointed at the remote sensor on the player.

- ➔ The remote sensor of the player is exposed to strong light. Select a remote sensor that is not exposed to strong light (page 18).
- ➔ The remote sensor you are trying to use is not activated. Select the remote sensor you want to use (page 18).
- ➔ The batteries in the remote are weak.

The disc does not play.

- ➔ There is no disc inside.
- ➔ The disc is upside down. Insert the disc with the playback side facing down in the disc slot.
- ➔ The disc is skewed.
- ➔ The player cannot play CD-ROMs, etc. (page 8).
- ➔ The region code on the DVD VIDEO does not match the player.
- ➔ Moisture has condensed inside the player. Remove the disc and leave the player turned on for about half an hour. Turn on the power again before playing the disc (page 3).
- ➔ The player cannot play DVD-Rs, DVD-RWs, CD-Rs, or CD-RWs that are not finalized.
- ➔ You are trying to play the wrong medium (disc or "Memory Stick") in the wrong mode (disc mode or MS mode). Press MS to select the correct mode. (The MS indicator is lit in MS mode, and is off in disc mode.)

One of the following messages appears when you insert a "Memory Stick" into the player.

"Memory Stick error"/ "Insert a Memory Stick."

- ➔ The player cannot recognize the "Memory Stick."
Eject the "Memory Stick" and insert it again.

"Data error"

- ➔ The ATRAC3 audio track/JPEG image file you want to play is broken.
- ➔ You are trying to view the following data:
 - JPEG image recorded by a digital camera that image file format and directory structure are not DCF compliant (page 75)
 - JPEG image edited by a computer
 - has the extension ".JPG" but not in JPEG format

"Memory Stick type error"

- ➔ The "Memory Stick" is not compatible with the player (for instance, the "Memory Stick" is larger than 128MB, etc.).

"Format error"

- ➔ The "Memory Stick" was formatted in a way that does not conform to the player (Windows Explorer, etc.).

The following message appears when you play the DATA-CD.

"Data error"

- ➔ The MP3 audio track/JPEG image file you want to play is broken
- ➔ You are trying to view the following data:
 - the JPEG image file format does not conform to DCF (page 68)
 - has the extension ".JPG" but not in JPEG format

You cannot play MP3 audio tracks.

- ➔ You are trying to play the following data:
 - recorded on an "Memory Stick" (The player can play MP3 audio tracks recorded on DATA-CDs only)
 - does not conform to ISO9660 level 1, level 2 or Joliet
 - recorded in MP3PRO
 - has an extension other than ".MP3"
 - has the extension ".MP3" but not in MP3 format

You cannot view JPEG image files correctly.

- ➔ You are trying to view the following data:
 - does not conform to ISO9660 level 1, level 2 or Joliet
 - has an extension other than ".JPG"
 - larger than 4720 dots vertically or horizontally
 - does not fit the screen (those images are reduced)

The album/track/file names are not displayed correctly.

- ➔ The album/track/file name appears as asterisks (*).
The player can display only letters of the alphabet and numbers. Other characters appear as asterisks.
-

You cannot play ATRAC3 audio tracks.

In the case of music data with playback date restriction:

- ➔ The current date is not set, or was reset because the power cord was disconnected. Set the date and time (page 74).
- ➔ The date setting has expired. "Time limit expired" appears on the display.

In the case of music data for which the number of playback times is restricted:

- ➔ The "MG Memory Stick" erasure prevention switch is locked. "Copyright lock" appears on the display.
Unlock the erasure prevention switch.
 - ➔ The data has been played as many times as is allowed. "Playback limit exceeded" appears on the display.
-

The disc does not start playing from the beginning.

- ➔ Program Play, Shuffle Play, Repeat Play or A-B Repeat Play has been selected (page 43).
Press CLEAR to cancel these functions before playing a disc.
 - ➔ Resume Play has been selected.
During stop, press ■ on the player or the remote and then start playback (page 40).
 - ➔ The disc automatically displays the menu.
-

The player starts playing the disc automatically.

- ➔ The disc features an auto playback function.
 - ➔ "AUTO PLAY" in "CUSTOM SETUP" is set to "TIMER" (page 89).
-

Playback stops automatically.

- ➔ Some discs may contain an auto pause signal. While playing such a disc, the player stops playback at the auto pause signal.
-

You cannot perform some functions such as stop, Scan, Slow-motion Play, Repeat Play, Shuffle Play, or Program Play.

- ➔ Depending on the disc, you may not be able to do some of the operations above. See the operating manual that comes with the disc.
-

Messages do not appear on the screen in the language you want.

- ➔ In the Setup Display, select the desired language for the on-screen display in "OSD" under "LANGUAGE SETUP" (page 86).
-

The language for the sound track cannot be changed.

- ➔ Multilingual tracks are not recorded on the DVD VIDEO being played.
 - ➔ The DVD VIDEO prohibits the changing of the language for the sound track.
-

The subtitle language cannot be changed.

- ➔ Multilingual subtitles are not recorded on the DVD VIDEO being played.
 - ➔ The DVD VIDEO prohibits the changing of the subtitles.
-

The subtitle cannot be turned off.

- ➔ The DVD VIDEO prohibits the subtitles being turned off.
-

The angles cannot be changed.

- ➔ Multi-angles are not recorded on the DVD VIDEO being played.
 - ➔ The angle can be changed only when the "ANGLE" indicator lights up on the front panel display (page 11).
 - ➔ The DVD VIDEO prohibits changing of the angles.
-

continued ➔

The player does not operate properly.

- ➔ When static electricity, etc., causes the player to operate abnormally, disconnect the AC power cord once, then connect it again.

Nothing is displayed on the front panel display.

- ➔ “DIMMER” in “CUSTOM SETUP” is set to “OFF.” Set “DIMMER” to “BRIGHT” or “DARK” (page 89). If you set to “AUTO,” the display turns on only when you operate the player.

5 numbers or letters are displayed on the screen and on the front panel display.

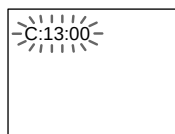
- ➔ The self-diagnosis function was activated.
(See the table on page 96.)

The disc cannot be removed and “LOCKED” appears on the front panel display.

- ➔ Contact your Sony dealer or local authorized Sony service facility.
-

Self-diagnosis Function**(When letters/numbers appear in the display)**

When the self-diagnosis function is activated to prevent the player from malfunctioning, a five-character service number (e.g., C 13 00) with a combination of a letter and digits appears on the screen and the front panel display. In this case, check the following table.



First three characters of the service number	Cause and/or corrective action
C 13	The disc is dirty. ➔ Clean the disc with a soft cloth (page 9).
C 31	The disc is not inserted correctly. ➔ Re-insert the disc correctly.
E XX (xx is a number)	To prevent a malfunction, the player has performed the self-diagnosis function. ➔ Contact your nearest Sony dealer or local authorized Sony service facility and give the 5-character service number. Example: E 61 10

Glossary

Album (page 67, 69, 76)

A unit in which to store JPEG image files or MP3/ATRAC3 audio tracks on a DATA-CDs or “Memory Stick.” (“Album” is an exclusive definition for this player.)

ATRAC3 (page 73)

ATRAC3 (Adaptive Transform Acoustic Coding 3), is audio compression technology that satisfies the demand for high sound quality and high compression rates. The ATRAC3 compression rate is approximately 10 times higher than that of the audio CD format, resulting in increased data capacity.

Chapter (page 11)

Sections of a picture or a music feature that are smaller than titles. A title is composed of several chapters. Depending on the disc, no chapters may be recorded.

Dolby Digital (page 24, 92)

Digital audio compression technology developed by Dolby Laboratories. This technology conforms to 5.1-channel surround sound. The rear channel is stereo and there is a discrete subwoofer channel in this format. Dolby Digital provides the same 5.1 discrete channels of high quality digital audio found in Dolby Digital cinema audio systems. Good channel separation is realized because all of the channel data are recorded discretely and little deterioration is realized because all channel data processing is digital.

Dolby Surround (Pro Logic) (page 91)

Audio signal processing technology that Dolby Laboratories developed for surround sound. When the input signal contains a surround component, the Pro Logic process outputs the front, center, and rear signals. The rear channel is monaural.

DTS (page 24, 92)

Digital audio compression technology that Digital Theater Systems, Inc. developed. This technology conforms to 5.1-channel surround sound. The rear channel is stereo and there is a discrete subwoofer channel in this format. DTS provides the same 5.1 discrete channels of high quality digital audio.

Good channel separation is realized because all of the channel data is recorded discretely and little deterioration is realized because all channel data processing is digital.

DVD-RW (page 41)

A DVD-RW is a recordable and rewritable disc with the same size as the DVD VIDEO. The DVD-RW can be recorded in two different modes: VR mode and Video mode. VR (Video Recording) mode enables various programming and editing functions, some of which are limited in the case of Video mode. Video mode complies with DVD VIDEO format and is compatible with DVD players while a DVD-RW recorded in VR mode can only be played on DVD-RW compliant players. The “DVD-RW” appears in this manual, or the on-screen display refers to DVD-RWs in VR mode.

DVD VIDEO (page 7)

A disc that contains up to 8 hours of moving pictures even though its diameter is the same as a CD.

The data capacity of a single-layer and single-sided DVD is 4.7 GB (Giga Byte), which is 7 times that of a CD. The data capacity of a double-layer and single-sided DVD is 8.5 GB, a single-layer and double-sided DVD is 9.4 GB, and double-layer and double-sided DVD is 17 GB.

The picture data uses the MPEG 2 format, one of the worldwide standards of digital compression technology. The picture data is compressed to about 1/40 (average) of its original size.

The DVD VIDEO also uses a variable rate coding technology that changes the data to be allocated according to the status of the picture. Audio information is recorded in Dolby Digital as well as in PCM, allowing you to enjoy a more real audio presence. Furthermore, various advanced functions such as the multi-angle, multilingual, and Parental Control functions are provided with the DVD VIDEO.

File (page 69, 76)

A JPEG image recorded on a DATA-CD or “Memory Stick.” (“File” is an exclusive definition for this player.) A single file consists of a single image.

Index (CD)/Video Index (VIDEO CD) (page 50)

A number that divides a track into sections to easily locate the point you want on a VIDEO CD or CD. Depending on the disc, no index may be recorded.

Parental Control (page 78)

A function of the DVD VIDEO used to limit playback of the disc according to the age of the user and the limitation level in each country. The limitation varies from disc to disc; when it is activated, or playback is completely prohibited, violent scenes are skipped or replaced with other scenes, etc.

Region Code (page 7)

This system is used to protect copyrights. A region number is allocated on each DVD player or DVD disc according to the sales region. Each region code is shown on the player as well as on the disc packaging. The player can play the discs that match its region code. The player can also play discs with the  mark. Even when the region code is not shown on the DVD, the region limit may still be activated.

SDMI

SDMI which stands for Secure Digital Music Initiative, is a forum that consists of over 130

companies in the fields of recorded audio content, computers, and consumer electronics, dedicated to developing an integrated method of copyright protection technology that can be used worldwide. SDMI is working to create a framework for preventing improper usage of audio files and to promote legal music distribution services.

Scene (page 11)

On a VIDEO CD with PBC (playback control) functions, the menu screens, moving pictures and still pictures are divided into sections called “scenes.”

Title (page 11)

The longest section of a picture or music feature on a DVD, movie, etc., in video software, or the entire album in audio software.

Track (page 11)

Sections of a picture or a music feature on a VIDEO CD, CD, DATA-CD or “MG Memory Stick” (the length of a song). (“Track” in DATA-CD or “MG Memory Stick” is an exclusive definition for this player.)

TV Virtual Surround (TVS) (page 59)

Technology from Sony developed to produce surround sound for home use using just a stereo TV. Designed to work with the sound characteristics of your TV, this technology brings the excitement of surround sound to your home using nothing more than your stereo TV’s internal speakers. Furthermore, various TVS modes are available. For example, “TVS WIDE” uses just two speakers to create a virtual sound environment that makes you feel like you are surrounded by multiple speakers.

Specifications

System

Laser	Semiconductor laser
Signal format system	NTSC

Audio characteristics (DVD/CD)

Frequency response	DVD VIDEO (PCM 96 kHz): 2 Hz to 44 kHz (±1.0 dB) DVD VIDEO (PCM 48 kHz): 2 Hz to 22 kHz (±0.5 dB) CD/“MG Memory Stick” (ATRAC3): 2 Hz to 20 kHz (±0.5 dB)
Signal-to-noise ratio (S/N ratio)	115 dB (AUDIO OUT L/R jacks only)
Harmonic distortion	0.003%
Dynamic range	DVD VIDEO: 103 dB CD/“MG Memory Stick” (ATRAC3): 99 dB
Wow and flutter	Less than detected value (±0.001% W PEAK)

The signals from AUDIO OUT L/R jacks are measured. When you play PCM sound tracks with a 96 kHz sampling frequency, the output signal from the DIGITAL OUT (OPTICAL) jack is converted to 48 kHz sampling frequency.

Outputs

Jack name	Jack type	Maximum output level	Load impedance
DIGITAL OUT (OPTICAL)	Optical output jack	-18 dBm	Wave length 660 nm
AUDIO OUT L/R	Phono jack	2 Vrms (50 kilohms)	Over 10 kilohms
VIDEO OUT	Phono jack	1.0 Vp-p	75 ohms, sync negative
S-VIDEO OUT	4-pin mini DIN	Luminance signal: 1.0 Vp-p Color signal: 0.286 Vp-p	75 ohms, sync negative 75 ohms terminated

General

Power requirements	DC 10.5 V See page 3 for further information.
Power consumption	12 W
Dimensions (approx.)	252 × 60 × 183 mm (10 × 2 3/8 × 7 1/4 in.) (width/height/depth) including projecting parts
Mass (approx.)	1.5 kg (3 lb. 5 oz.)
Operating temperature	5°C to 35°C (41°F to 95°F)
Operating humidity	25% to 80%

AC power adaptor

Model name	AC-F21
Power requirements	100 – 240 V AC, 50/60 Hz
Output voltage	DC 10.5 V, 1.3 A in operating mode
Operating temperature	5°C to 35°C (41°F to 95°F)
Storage temperature	–20°C to 60°C (–4°F to 140°F)

Supplied accessories

See page 17.

Optional accessory

Active Speaker System SA-F21

Specifications and design are subject to change without notice.

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Language Code List

For details, see page 57, 63, 86.
The language spellings conform to the ISO 639: 1988 (E/F) standard.

Code	Language	Code	Language	Code	Language	Code	Language
1027	Afar	1183	Irish	1347	Maori	1507	Samoaan
1028	Abkhazian	1186	Scots Gaelic	1349	Macedonian	1508	Shona
1032	Afrikaans	1194	Galician	1350	Malayalam	1509	Somali
1039	Amharic	1196	Guarani	1352	Mongolian	1511	Albanian
1044	Arabic	1203	Gujarati	1353	Moldavian	1512	Serbian
1045	Assamese	1209	Hausa	1356	Marathi	1513	Siswati
1051	Aymara	1217	Hindi	1357	Malay	1514	Sesotho
1052	Azerbaijani	1226	Croatian	1358	Maltese	1515	Sundanese
1053	Bashkir	1229	Hungarian	1363	Burmese	1516	Swedish
1057	Byelorussian	1233	Armenian	1365	Nauru	1517	Swahili
1059	Bulgarian	1235	Interlingua	1369	Nepali	1521	Tamil
1060	Bihari	1239	Interlingue	1376	Dutch	1525	Telugu
1061	Bislama	1245	Inupiak	1379	Norwegian	1527	Tajik
1066	Bengali; Bangla	1248	Indonesian	1393	Occitan	1528	Thai
1067	Tibetan	1253	Icelandic	1403	(Afan) Oromo	1529	Tigrinya
1070	Breton	1254	Italian	1408	Oriya	1531	Turkmen
1079	Catalan	1257	Hebrew	1417	Punjabi	1532	Tagalog
1093	Corsican	1261	Japanese	1428	Polish	1534	Setswana
1097	Czech	1269	Yiddish	1435	Pashto; Pushto	1535	Tonga
1103	Welsh	1283	Javanese	1436	Portuguese	1538	Turkish
1105	Danish	1287	Georgian	1463	Quechua	1539	Tsonga
1109	German	1297	Kazakh	1481	Rhaeto- Romance	1540	Tatar
1130	Bhutani	1298	Greenlandic	1482	Kirundi	1543	Twi
1142	Greek	1299	Cambodian	1483	Romanian	1557	Ukrainian
1144	English	1300	Kannada	1489	Russian	1564	Urdu
1145	Esperanto	1301	Korean	1491	Kinyarwanda	1572	Uzbek
1149	Spanish	1305	Kashmiri	1495	Sanskrit	1581	Vietnamese
1150	Estonian	1307	Kurdish	1498	Sindhi	1587	Volapük
1151	Basque	1311	Kirghiz	1501	Sangho	1613	Wolof
1157	Persian	1313	Latin	1502	Serbo- Croatian	1632	Xhosa
1165	Finnish	1326	Lingala	1503	Singhalese	1665	Yoruba
1166	Fiji	1327	Laothian	1505	Slovak	1684	Chinese
1171	Faroese	1332	Lithuanian	1506	Slovenian	1697	Zulu
1174	French	1334	Latvian; Lettish				
1181	Frisian	1345	Malagasy			1703	Not specified

List of Setup Display Items

The default settings are underlined.



LANGUAGE SETUP (page 86)

OSD	<u>ENGLISH</u> FRENCH SPANISH PORTUGUESE
MENU	<u>ENGLISH</u> FRENCH SPANISH PORTUGUESE GERMAN ITALIAN DUTCH CHINESE JAPANESE DANISH SWEDISH FINNISH NORWEGIAN RUSSIAN OTHERS →
AUDIO	<u>ORIGINAL</u> (All other selections are same as the “MENU” language.)
SUBTITLE	<u>AUDIO FOLLOW</u> (All other selections are same as the “MENU” language.)



SCREEN SETUP (page 87)

TV TYPE	<u>4:3 LETTER BOX</u> 4:3 PAN SCAN 16:9
SCREEN SAVER	<u>ON</u> OFF
BACKGROUND	<u>JACKET PICTURE</u> GRAPHICS BLUE BLACK

**CUSTOM SETUP (page 89)**

AUTO PLAY	<u>OFF</u> TIMER DEMO1 DEMO2
DIMMER	<u>BRIGHT</u> DARK OFF AUTO
PAUSE MODE	<u>AUTO</u> FRAME
TRACK SELECTION	<u>OFF</u> AUTO
DATE/TIME SETUP ➔	

**AUDIO SETUP (page 90)**

AUDIO ATT	<u>OFF</u> ON		
AUDIO DRC	<u>STANDARD</u> TV MODE WIDE RANGE		
DOWNMIX	<u>DOLBY SURROUND</u> NORMAL		
DIGITAL OUT	<u>ON</u>	DOLBY DIGITAL	<u>D-PCM</u> DOLBY DIGITAL
		DTS	<u>OFF</u> ON
	OFF		

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